THE Country GUIDE

AUGUST, 1955

The 80 SP Special has the greatest capacity of any combine in its class. Like the 90 SP Special, it's built with the full width straight-through body design that gives you elevator, concave and cylinder, straw walker body and shaker shoe all the same width for *extra capacity*.

You get capacity plus high trade-in value with a Massey-Harris combine

What do you look for in a new combine? Capacity? A foolproof cleaning mechanism? Economical operation? The ability to get crops in fast and without stoppages?

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You get economical, non-stop performance from a powerful 6-cylinder engine, and a smooth, unbunched flow of straw from the cutter bar to the straw spreader. This combined with Massey-Harris' exclusive Dyna-Air Chaff Control, gives you cleaner grain—more profit in your grain bin.

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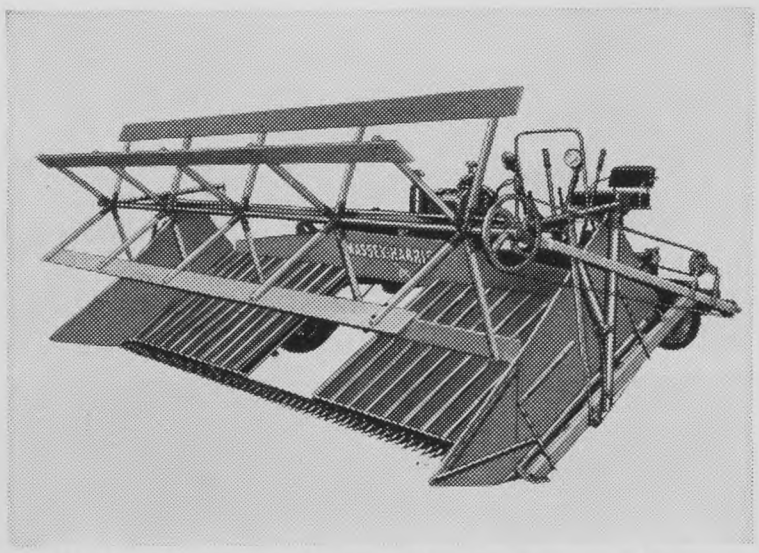

NEW Massey-Harris Self-Propelled Swather, the perfect teammate for a M-H 80 or 90 Combine, gets you started early—with no waiting for green spots to ripen. Helps you avoid disastrous weather loss. Two P.T.O. models also available.

Lowest centre of gravity of any combine on the market gives you unparalleled safety and smoother ride. This picture taken at the Massey-Harris test track, shows the 90 SP undergoing a torture ride over rough ground.

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THE Country GUIDE

From Cover to Cover

AUGUST, 1955

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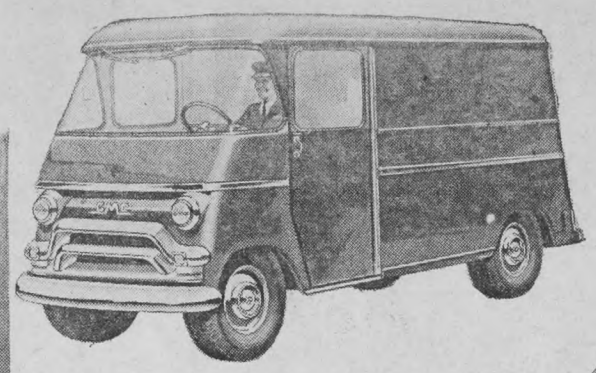

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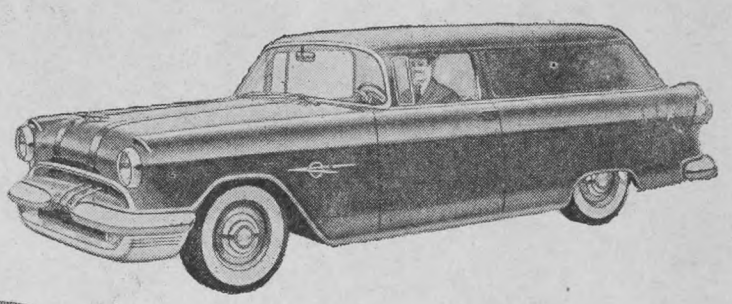
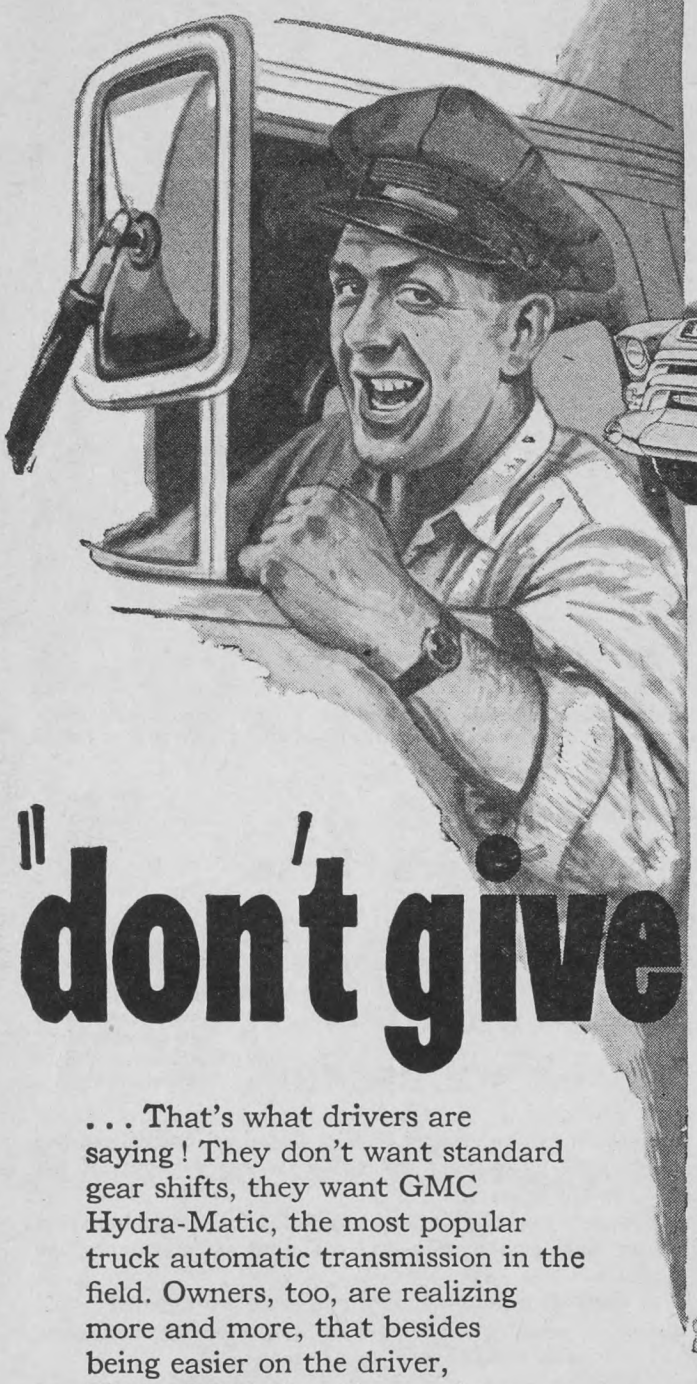
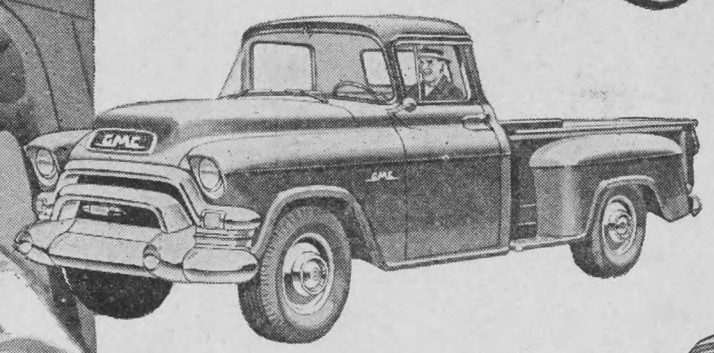
HYDRA-MATIC makes a modern looking truck a truly modern driving truck.

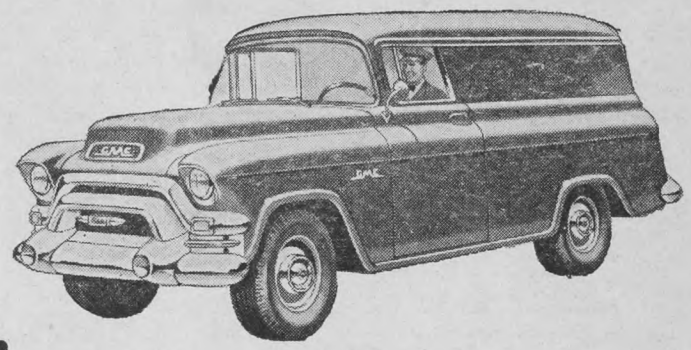






HYDRA-MATIC automatically keeps your truck in the right gear on or off the road.

HYDRA-MATIC cuts down the fatigue of constant driving in city traffic.

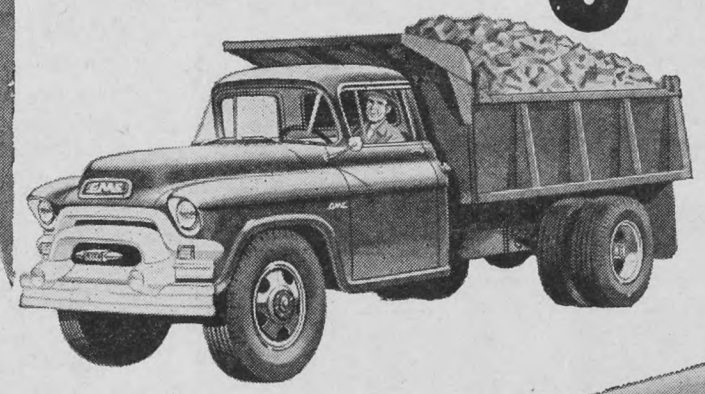


"don't give me the gears..."

. . . That's what drivers are saying! They don't want standard gear shifts, they want GMC Hydra-Matic, the most popular truck automatic transmission in the field. Owners, too, are realizing more and more, that besides being easier on the driver, Hydra-Matic is easier on the truck—it keeps it in the correct gear under any load —eliminates expense and costly break-downs due to incorrect shifting.

Get the full story of Hydra-Matic trucking from your GMC dealer today and ask for a demonstration drive.

A GENERAL MOTORS VALUE



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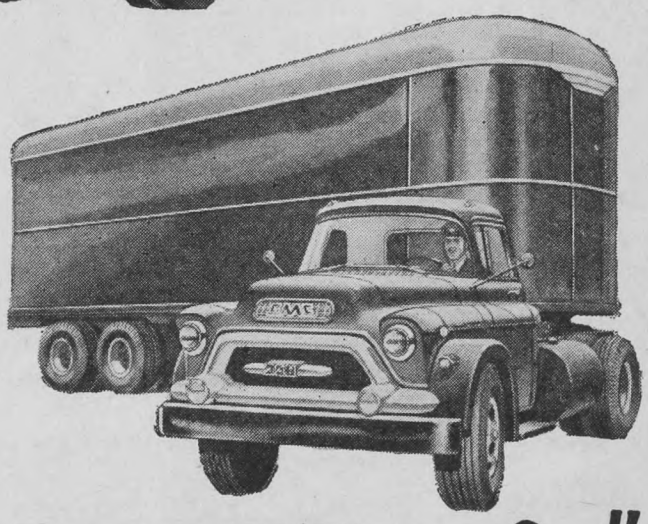


HYDRA-MATIC fits every type of job —choose from single and twin Hydra-Matic, with up to 21 forward and 3 reverse gear ratios.

BLUE CHIP '55 GMC TRUCKS

I want GMC Hydra-Matic"

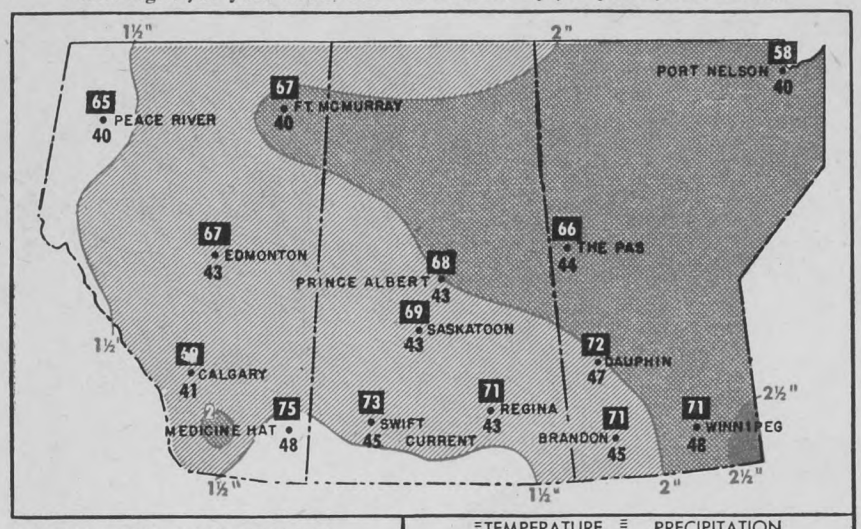
(AUTOMATIC TRANSMISSION)

Prairie Weather

Prepared by DR. IRVING P. KRICK *and Staff for*

THE *Country* GUIDE

(Allow a day or two either way in using this forecast. It should be 75 per cent right for your area, but not necessarily for your farm.—ed.)

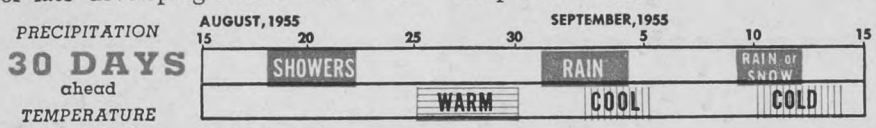


AVERAGE WEATHER
AUGUST 15-SEPTEMBER 15

KEY: TEMPERATURE 99 Max. 33 Min. | PRECIPITATION Average Inches During Period

Alberta

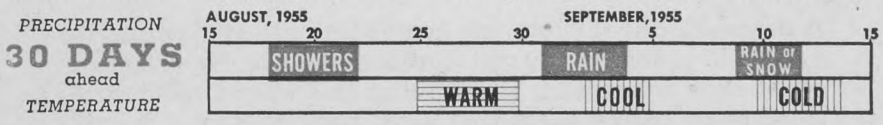
Warm and relatively dry conditions will characterize the weather in Alberta during the latter half of August. Shower activity is expected from the 18th through the 22nd, but amounts are unlikely to prove damaging to cut grains and downed hay. A trend to considerably cooler and rather wet weather will occur about the 1st of September. Some difficulty will be experienced in directly combining small grains due to soft soils. Maturity of late developing stands will be retarded. Threshing of grain in the swath will also be impeded. Freezing temperatures will accompany rain and snow in the second week of September. Modest damage to late-seeded grains is anticipated in the Foothills area west of Calgary and Red Deer. Frosts will terminate the season for tender garden crops. Beets in the Lethbridge district will continue to develop nicely until retarded by low temperatures in September. Altogether, total heat units for the summer will be insufficient for optimum development of roots. V



Saskatchewan

Cold and rain in September will tread on the heels of two weeks of warm and relatively dry weather during the latter half of August. Only brief showers are expected from the 15th to 31st of August, principally around the 20th of the month. Crop development will advance materially. Considerable progress will be possible in the cutting, threshing or direct combining of small grains in the south. Rather obnoxious rain, snow and cold in September will retard maturity of late seedings and seedings in the more northern latitudes. Combining will become a catch-as-catch-can proposition. Freezing temperatures associated with the stormy conditions during the second week of September will inflict some damage to immature grains. Growth of potatoes and tender garden crops will be terminated.

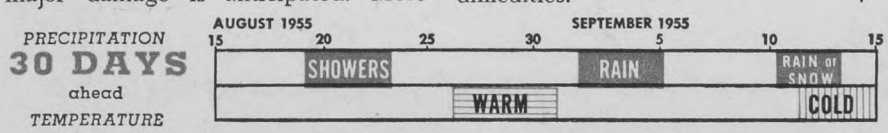
Somewhat analogous weather prevailed in the province last year, although considerably more distasteful. V

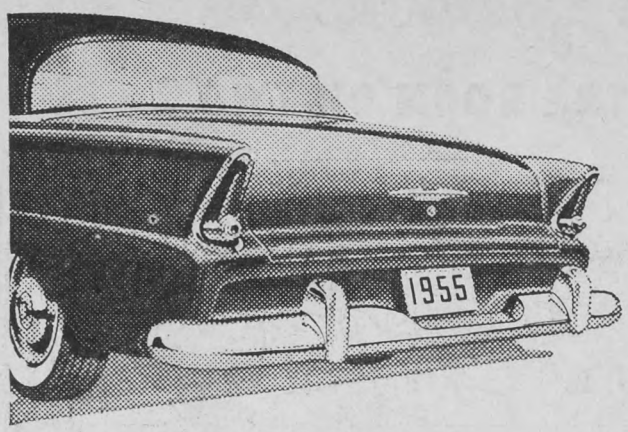


Manitoba

Typically seasonal weather will prevail in Manitoba from mid-August to mid-September. Rather high temperatures and only brief showers will enhance development of small grains during the latter part of August. Cutting and threshing should be well advanced prior to the advent of wet conditions in early September. Rain and possibly some snow, however, temporarily will impede field operations about September 10. Light frosts will accompany the latter storm, but no major damage is anticipated. Most corn should be safely matured. Considerable progress should be made in harvesting potatoes and other vegetable crops. September rains will encourage excellent growth of grasses and legumes for fall forage, although hay in the windrow will experience modest loss of quality. Root development of sugar beets will be quite favorable.

Wet weather plagued the province at this time last year. Rust continued to raise havoc and lodging of small grains added considerably to harvest difficulties. V

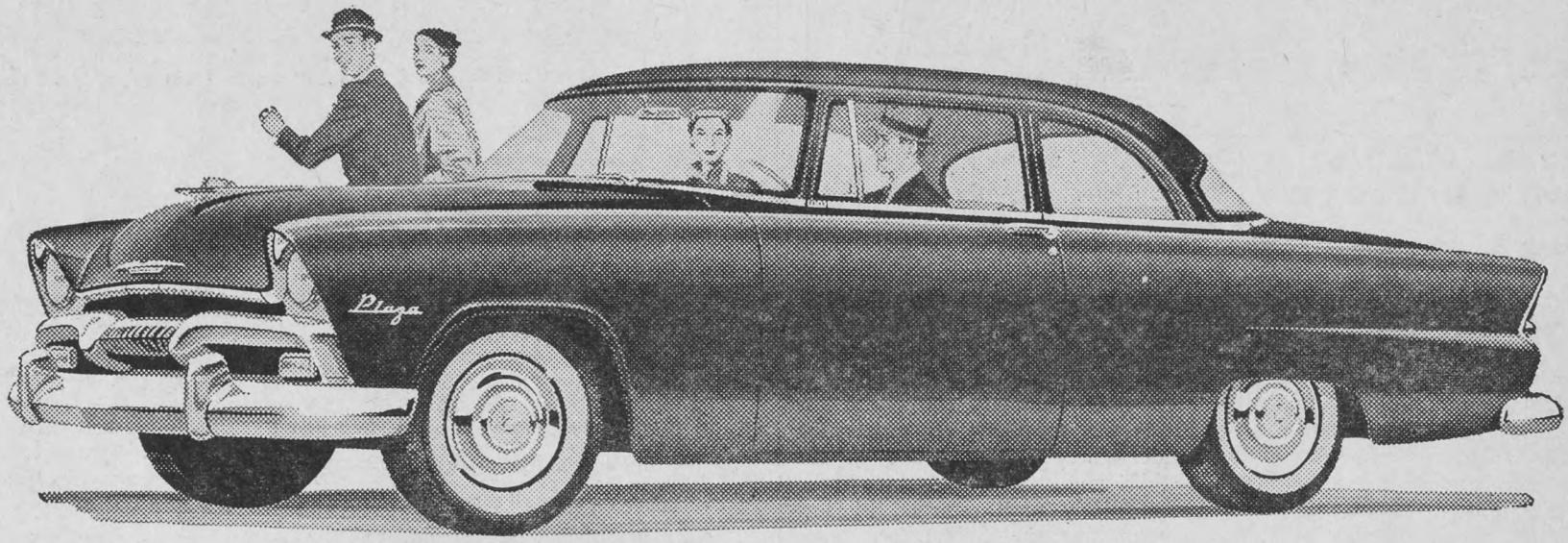




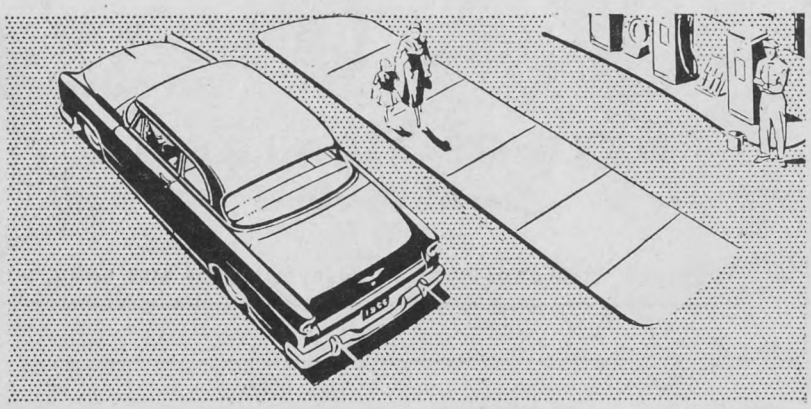
So big and beautiful—

'55 PLYMOUTH

Brings you fresh, new high style with The Forward Look



Longest, lowest, smartest ever... with new *Motion-Design* styling... today's best value!



Thriftiest in the long run!

New carburetion in the thrifty Plymouth PowerFlow Six engine makes your fuel last longer . . . ensures more power under all driving conditions. Rugged construction means long engine life and low maintenance costs, too. Under the Plymouth beauty, you will find solid value.

Manufactured in Canada by Chrysler Corporation of Canada, Limited

Wherever you go, you see more and more new '55 Plymouths! Whenever one cruises by, you notice people glance admiringly at its impressive new length and brilliant new beauty! Already it has influenced the entire industry's stylists.

Modern as tomorrow! Everyone likes the look of action that is in each rakish angle, from hooded headlights to boldly slanted taillights. The sleek new Plymouth silhouette is so long and low—more than ten inches longer this year and barely five feet from roof to road.

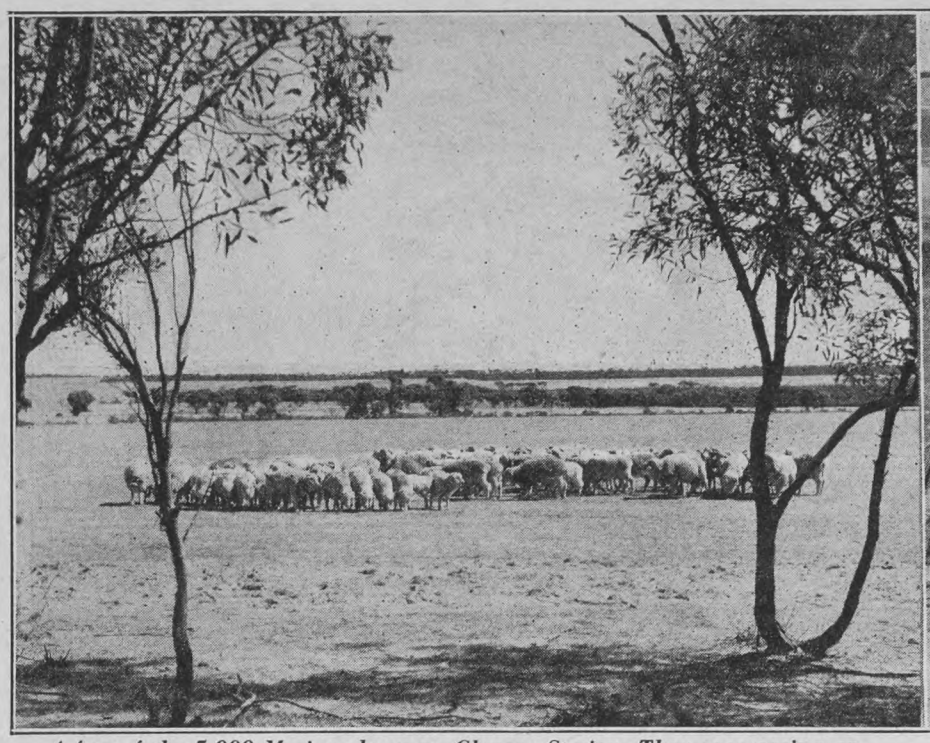
A dream to drive! Motorists everywhere are applauding the increased visibility you get through the big New Horizon swept-back windshield. It's the first *true* wrap-around windshield with corner posts that slant back to give you extra glass area at top, as well as at bottom corners.

For road-hugging stability, Plymouth for '55 is actually wider than it is high—front tires are spaced wider apart, rear springs are wider, too.

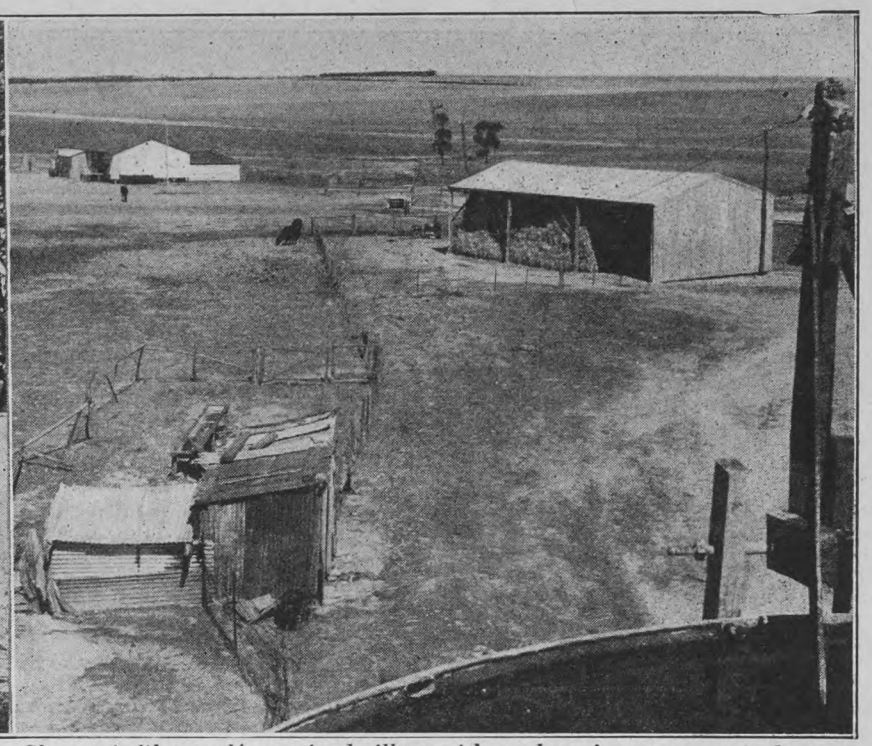
Livelier power! You'll hear many comments on the added horsepower provided this year in the new high-performance PowerFlow Six engine of the Plaza Club Sedan shown above. Plymouth also has new V-8's for flashing performance.

Yet, with all its beauty, bigness, and extra-quality features, thrifty buyers have been pleased to discover that Plymouth is *priced with the lowest!* Look it over . . . check its value . . . and you'll see why the big swing is to Plymouth this year!

Plymouth is the car to measure against this year... see it now at your Chrysler-Plymouth-Fargo dealer's!



A few of the 5,000 Merino sheep on Glenvar Station. They are grazing on stubble, which is very important as dry food, as the story herewith explains.



Glenvar is like a self-contained village with workmen's cottage, main house and outbuildings. Here the dairy and hay shed are seen from water tower.

It's Drier in Western Australia

Mr. and Mrs. W. H. Shields sit in the shade of the wide verandah with their son Eardley. A cool swimming pool is popular with staff and neighbors.

Eighteen bushels per acre from sandy land, with eight inches of rainfall — and plenty of superphosphate

by LYN HARRINGTON

Photos by Richard Harrington

SO firmly was the idea planted in my schooldays that "wheat grows in the Prairie Provinces," that it still comes as a shock to me to find it growing anywhere else. There are few crops so widely grown as wheat, it now appears.

Gusts of rain blotted out the West Australian landscape as we drove with Mr. Dave Bateman, of the State Experimental Farm, toward Glenvar Station.

"Glenvar is one of the best stations in this part of the country," he told us. "Well, no, you couldn't call it quite typical—too prosperous for that term. But it is a wheat farm, and a good one, and that's what you wanted to see, isn't it?"

It was exactly what we wanted to see, when we learned that Western Australia has the largest wheat-growing area in the great continent "down under."

"But," Mr. Bateman went on, "your country grows a lot more than we do. I'd sure like to see Canada sometime, especially Saskatchewan."

We laughed. "Then just look around you. This is enough like Saskatchewan to fool anyone. If those scrub gum trees were willow and the taller ones were poplar, you'd have southern Saskatchewan to the life."

However, we had to admit that the soil was not the same, by any means. Instead of the deep black loam of our prairie province, Western Australia has light sandy soil — actually sea sand left behind when the continent uplifted. Wheat returns on this soil average 12 bushels per acre. The sand is practically an inert substance until superphosphate is added in generous quantity.

Most Canadians would feel it improper to set plow into such light soil. We'd figure it should be in trees, —pasture at most. But in prolonged dry spells, this light soil gives the best wheat crops, strangely enough. Slightly heavier land to the west gives larger yields—when it gets rain. But in 1954, when Glenvar Station had only eight inches of rain, the Shields family managed to average about 18 bushels to the acre. The crop wasn't worth harvesting on the heavier soil.

AS we neared Glenvar, we could see the long lane into the homestead, bordered with tall eucalyptus trees. The wind tossed the tops, and ripped great strips of bark off the gum tree trunks. It was nice to get inside the comfortable homestead, to sit by the leaping hearthfire sipping tea, and smell the fragrance of roses on the brass-topped table. It was a home of charm and culture.

The Station itself is a miracle of faith and good farming techniques. "A bob an acre" (25 cents) was the price when W. H. Shields took up 23,000 acres in 1924. Most of the land has been cleared of scrub growth, and now supports about 50 people, including the Shields and the families of their staff.

Irish-born W. H. Shields spent his childhood in France, and was educated in Scotland, where he obtained his civil engineering degree. He came to Australia in 1893, on recommendation of an uncle who made (and lost) a fortune in Queensland. Mr. Shields decided for Western Australia, and was engineer in the government service for over 20 years. Then he took up land in the Wongan Hills, 150 miles northeast of Perth, a region considered too arid to grow anything much.

Glenvar is now a pastoral company, owned by Mr. and Mrs. W. H. Shields, their sons Eardley and Hubert, and the latter's wife. Hubert Shields, managing director of the company, was absent on a holiday at the time of our visit. He is chairman of the Wongan Hills Board, a political division which corresponds to a township, or shire.

Mr. Shields has retired from active farming, and the sons do little of the manual labor themselves. But the farm is outstanding in the Wongan Hills area, with its well-cultivated acres. The Shields are progressive farmers, who have not lost sight of the fact that there's more to life than plowing and reaping.

Australian seasons are the reverse of Canadian, as everyone knows. But farming here does a double-reverse. They grow their crops in winter—the summer is too hot.

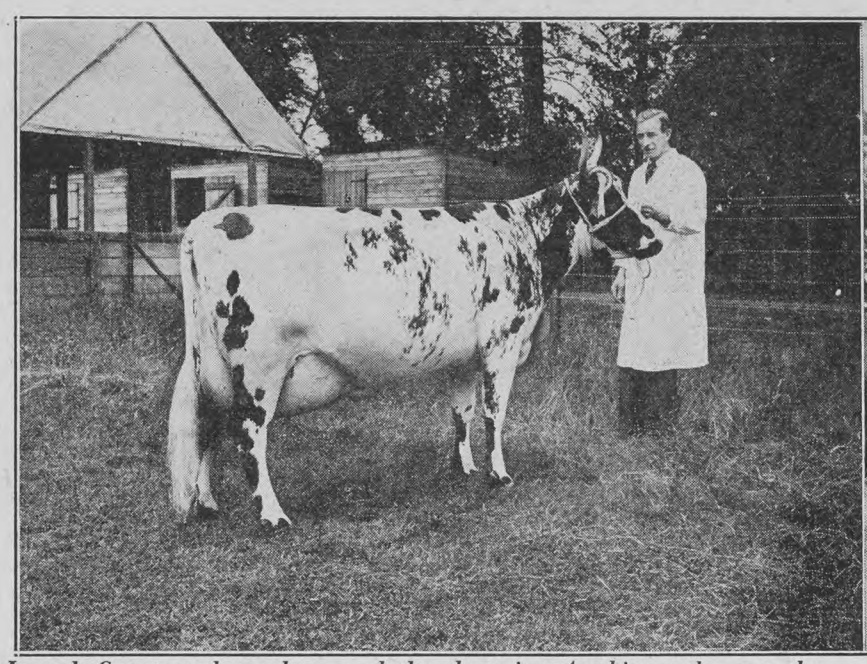
"It's most unusual to have rain in February at the height of our summer season," Eardley Shields remarked wryly, glancing out at the teeming rain. "It won't do the crops any good, either. That is, unless we were to get more rain every two or three weeks, —and that would be still more unusual."

I'd have thought that every drop of rain would be welcomed in an area where the normal rainfall is 13 inches a year, and often less than that. The moisture vanishes very quickly in the light soil.

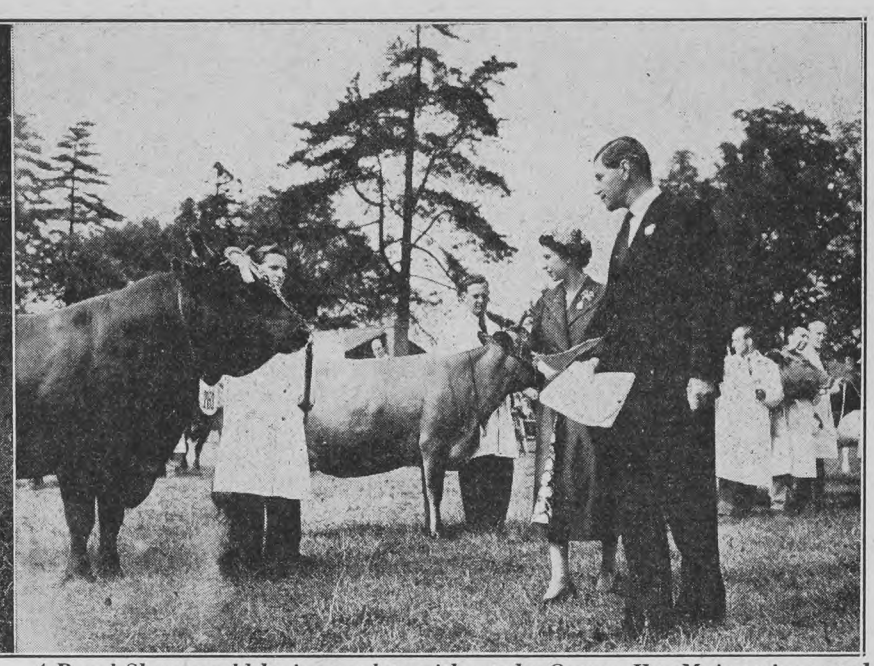
"The trouble," Eardley explained, "is that this rain will soften the stubble on which our sheep are grazing, and ruin it as dry feed. It will start any seeds germinating. That would be all right if it got more rain later, but you can't count on that. It will mean that we'll have to hand-feed the sheep with hay stores."

The rain made it difficult for us visitors, too, and when we returned to Glenvar on a sunny day a week later, we saw that the predictions were right. In between the rows of golden stubble, the weed seeds had germinated and grown quickly, under a few

(*Please turn to page* 28)



Lanoch Countess shown here, and the champion Ayrshire male, won the Burke Trophy for the best pair of dairy cattle at the British Royal Show.



A Royal Show would be incomplete without the Queen. Her Majesty inspected all of the cattle champions, on the second day of the Nottingham event.

Britain's Royal Show

A world-famous society, the Royal Agricultural Society of England stages its 1955 event, one of the greatest in its long history

by SYDNEY MOORHOUSE

Photos by Keith C. Taylor

WITH what British people call Royal weather—bright sunshine and blue skies—to mark a Royal occasion, the 1955 annual show of the Royal Agricultural Society of England, held at Wollaton Park, on the outskirts of the historic city of Nottingham, July 5-8, must be regarded as one of the greatest events ever staged by this old established society.

The agricultural show is, of course, an integral part of the British summer. Different counties and regions organize their own affairs; and it is perhaps worthy of note that the type of beast primarily associated with the commencement of these pleasant affairs was that upon which the medieval prosperity of Britain itself was founded—the sheep. It was, indeed, the great annual shearings organized by the celebrated Coke of Norfolk, at Holkham Hall, that started the vogue. At these momentous events, when it took some three days to shear the sheep, livestock belonging to the Holkham tenants were exhibited, carcasses were judged, rams were let out for winter use, and the latest developments of agricultural machinery, particularly threshing machines, were on view.

It was in 1838, after a number of shows developed from the old Holkham idea had already been held, that a band of enthusiasts came together to discuss the idea of holding an agricultural exhibition on a national basis. The following year, the newly formed Society—shortly to take on the name of the Royal Agricultural Society of England—held its first show on a seven-acre field at Oxford. The event was a great success, so much so that within a few hours of opening the stocks of admission tickets were completely exhausted. Indeed, at so early a stage in the Society's career, there were those who counselled against any attempt at repetition, saying that so successful a venture could never be repeated.

Fortunately, such dismal forebodings received scanty attention from the enthusiasts responsible for the direction of affairs. The rival University town of Cambridge housed a similar event the following year, when the number of implements on view rose from 54 to 115 and the livestock entries from 247 to 337. Since then the show has been held each year, with the exception of the periods of the two major wars, and in 1866, when what is described as a "cattle plague" caused a cancellation. What is even more interesting is that the show has continued to perambulate round the English counties, save for one brief spell when the Society experimented with a fixed site at Park Royal, on the outskirts of London, in the early years of the current century. That experiment was singularly unsuccessful and since then the Society has reverted to its original nomadic role, despite the fact that the task of removing all the essential amount of equipment is a terrific undertaking.

An example of what this means is afforded by the fact that already the general lay-out for next year's show at Newcastle-on-Tyne has been settled, and by the time that the last buildings have been dismantled at Nottingham, preparations for their re-erection at Newcastle will be well in hand. Not only that, but the planners are busy with their preparations for the 1957 show, which is to take place at Norwich, that lovely East Anglian city which is not very far away from the very foundations of it all at Holkham; and officials are surveying the western part of England, in an attempt to find a venue for the 1958 show.

The Duke of Edinburgh sees the championships awarded the Dexters, Britain's smallest breed.

THIS year, the greatest area in the history of the Show was used, but even so, an attendance of well over 150,000 folk on the first three days alone, meant that the 166 acres of Wollaton Park were not too large. It was, indeed, a colorful affair in a setting which was indelibly that of rural England. Although the industrial city of Nottingham sprawled to the very outskirts of the showground, one saw nothing to remind the visitor of anything other than agriculture and its various ancillaries—rural crafts, country institutions, and that great English pastime of hunting the fox.

Yet, despite its magnitude, there is a sense of intimacy about this great English show, an intimacy which was enhanced, when the Queen, paying an official visit on the second day, walked along avenues lined with thousands of cheering subjects and chatted to many of those folk whose daily jobs keep them in close contact with the land. The Duke of Edinburgh toured the showground by jeep, maintaining that easy informality of approach to farm workers and stockmen that is one of his outstanding characteristics. Indeed, throughout the sunny afternoon of the second day, one felt that here was a Royal Show at its best—regal weather in which Monarch and her peoples together paid homage to the earth and its bounties.

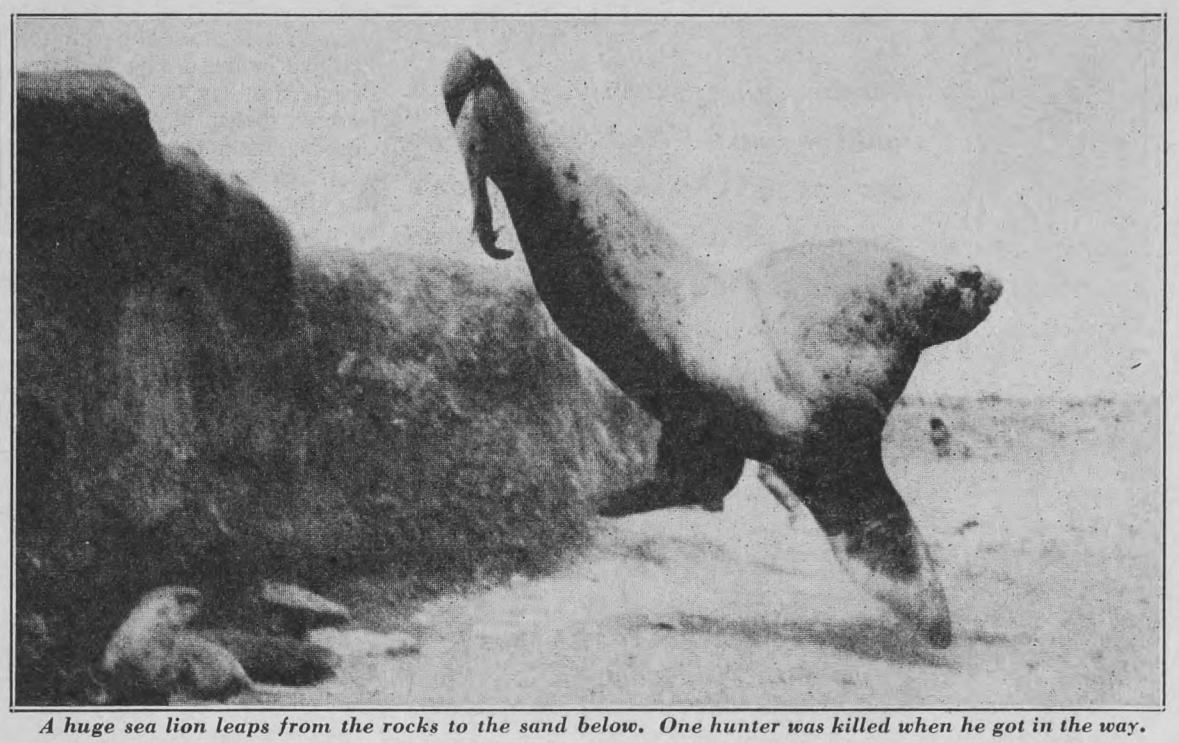
The Queen was among the exhibitors and figured in the prize list with her Red Poll cattle from the Royal herd at Sandringham. Also showing Red Polls was the Princess Royal, who has a herd on her Yorkshire farm at Harewood. There are, indeed, few greater enthusiasts — or more knowledgeable judges—of this ancient, hornless breed, than the Princess Royal; and as usual on her Royal Show visits she spent a considerable time around the rings while the animals were being judged. The Duke of Gloucester, who, like the Princess Royal, attended on each of the first two days of the show, has a herd of Guernseys on his Northamptonshire farm and spent a deal of time discussing these cattle from the Channel Islands, with the herdsman in charge.

THE Royal Show has been regarded from the very commencement of its career, as the "shop window" in which British stockbreeders display their goods for the world to see; and there were few more thrilling sights at Nottingham than that of more than 600 prize-winning animals of 19 different breeds being (*Please turn to page* 30)

Sea Lions for Mink Food

B.C. mink ranchers cut feed costs by killing sea lions which are plentiful and have no other uses

by C. V. TENCH



A huge sea lion leaps from the rocks to the sand below. One hunter was killed when he got in the way.

THOUSANDS of Steller sea lions inhabit numerous scattered islands off the coast of British Columbia. I was glad to accept an invitation to visit some of the rookeries. The opportunity to view these monsters at close range was particularly welcome, because, owing to their fierceness and the fact that they never can be tamed, they are rarely seen in zoos. I call them "monsters" advisedly, for the full-grown males weigh up to 2,400 pounds, and the females half as much, while the new-born pups scale about 35 pounds.

The best place to see the sea lions, I learned, was Triangle Island, some 400 miles up the coast from Vancouver. Long before we were close enough to view them we could hear them. From a distance of three miles their voices were merely a murmur, but at each revolution of our boat's propellor the noise intensified, until it presently developed into such a thunderous turmoil of sound that we had to shout at one another to make ourselves heard above the cacophony of coughing, grunting, roaring, and bellowing.

We did not land, for it was the breeding season, which meant that the huge bulls, and even the cows with pups, would be more than usually bellicose. Instead, we contented ourselves with watching the animals through powerful binoculars.

The whole island seemed to be swarming with the big mammals. Pups crawled aimlessly hither and thither, with their anxious mothers endeavoring to keep track of them, while the bulls bellowed furious challenges to one another. Here and there some huge bull would lumber over the rocks to drive an invader from his jealously guarded territory.

Through our glasses we had a close-up view of a fight between two massive young males. Several minutes were occupied in sparring for a hold, each keeping his fore-flippers as far back as possible to prevent his adversary getting a crippling grip. This is all-important, for if the muscles near the base of a flipper are torn, the limb becomes useless and the injured bull is compelled to retire. Although the Steller sea lions have sharp teeth and powerful jaws, the toughness of their hides usually saves them from anything worse than superficial skin wounds. As we watched, fascinated, one of the bulls made a swift lunge and succeeded in burying his two-inch canines in his opponent's fore-flipper, close to the body. Roaring with pain and rage, the other bull jerked backwards, leaving a strip of hide and flesh in his enemy's jaws. Still bellowing, the injured animal hastily limped away, pursued by the victor to the edge of the area in dispute.

Meanwhile, several other bulls, obviously entirely unafraid of man, plunged into the sea and swam around our boat. Others came to the water's edge and, rearing up on their fore-flippers, roared defiance and challenge.

UNTIL about 40 years ago sea lions were ruthlessly slaughtered because fishermen believed that they preyed on the shoals. The hides were also used for leather. It looked as though they would soon become extinct, but when it was discovered that the big mammals were *not* great fish eaters, and that leather made from their hides could not compete commercially with other leathers, the killing ceased. Today, it is estimated, there are about 20,000 sea lions in British Columbian waters alone.

At the request of the salmon fishing interests government biologists carry out annual tests, which invariably show that the animals are practically harmless to the fishing industry. Occasionally, of course, sea lions may damage nets and other gear, but not often enough to represent a serious menace. Not since 1938, therefore, has the Dominion Government found it necessary to dispatch slaughter parties to areas where fishermen complain that the animals have become a nuisance. For the most part sea lions give fishing craft a wide berth. But not always. Several instances are on record of huge sea lions actually ganging-up to attack a boat. On rare occasions sea lions have been known to seize fish already hooked. Such incidents rarely happen. It is generally agreed that sea lions molest fishermen only when their own normal food supply, for some reason or other, becomes temporarily scarce, causing them to become ravenous.

Despite this knowledge, many fishermen, owing to the possible risk, habitually carry rifles aboard their craft and shoot sea lions on sight. In consequence the animals have become gun shy, and usually avoid all boats.

Because it is generally agreed that sea lions possess no commercial value, they usually go unmolested by man. Having no natural enemies, they have multiplied exceedingly during the past few decades, despite the fact that the cows give birth to only a single pup each year. They are to be found all the way from Southern California to the Bering Sea, but it is only in British Columbian and Northern waters that the Steller species exists in uncounted thousands.

The Californian sea lions are much smaller—barely a quarter the size of the Stellers. In fact, the Californian sea lion is actually the "performing seal" of the show world. With exceedingly rare exceptions, this is the only member of the Pinnipedia tribe that has ever been trained by man to do tricks.

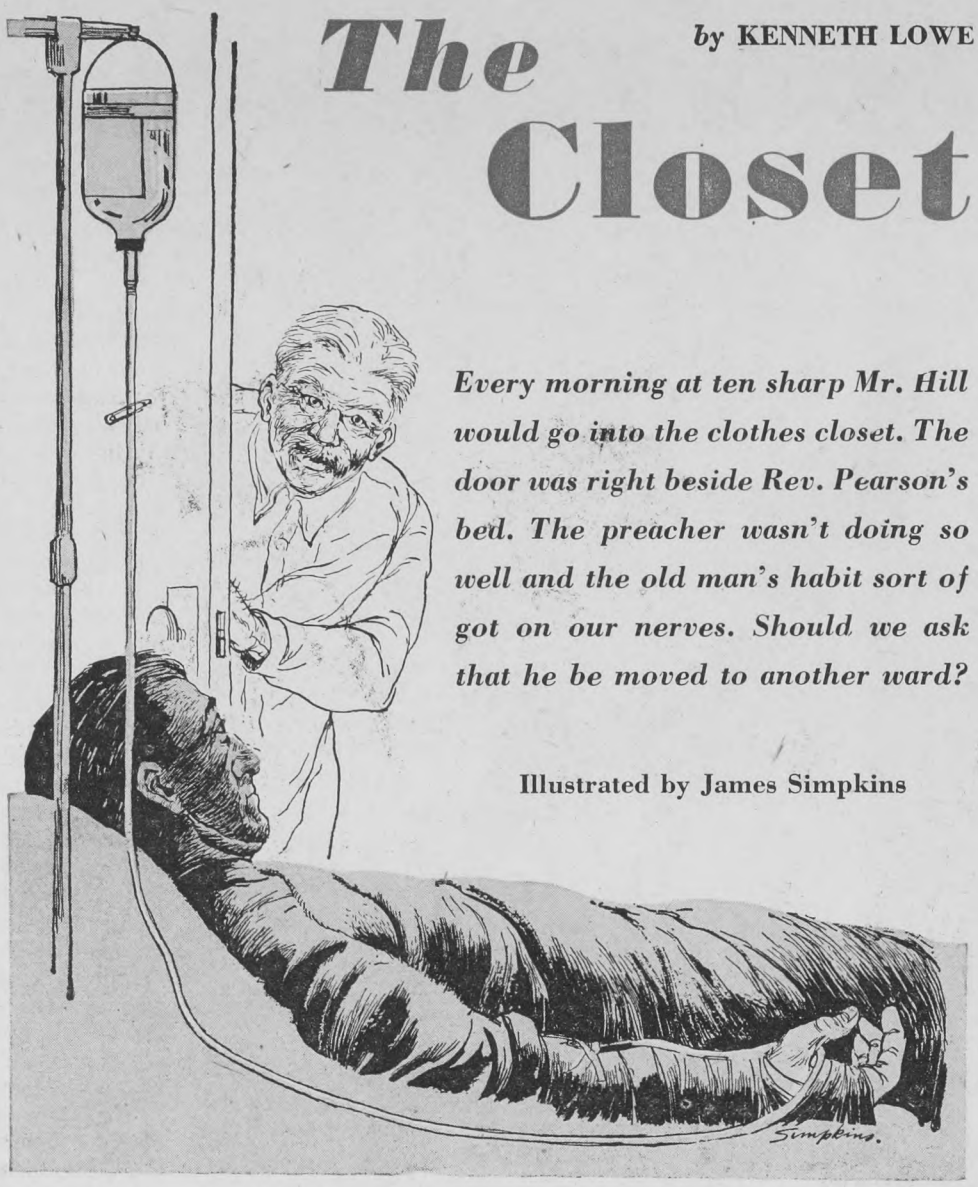
ALTHOUGH the Steller sea lions have hitherto been left to their own devices as practically worthless from the commercial point of view, now a new use has been found for them. In the summer of 1953, a number of mink ranchers in the Vancouver area initiated what may eventually become a new industry. Perturbed at the high cost of feed for their precious fur-bearers, several of the farmers got together, chartered a boat, and went out sea lion hunting.

Arrived at the selected rookery, the eight men of the party discovered that their first problem would be getting ashore. Calm had given way to storm, and they could see nothing but a beetling cliff fringed by half-submerged rocks lashed by great breakers that rolled in from the open Pacific. They held a brief council (*Please turn to page* 33)

On the left is the huge bull sea lion with his harem of cows and pups, which he will always fight for.

The Closet

by KENNETH LOWE



Every morning at ten sharp Mr. Hill would go into the clothes closet. The door was right beside Rev. Pearson's bed. The preacher wasn't doing so well and the old man's habit sort of got on our nerves. Should we ask that he be moved to another ward?

Illustrated by James Simpkins

THE old man came into our hospital ward by himself. He looked the room over slowly and picked out a bed. Then he opened his pasteboard suitcase and took out a pair of pyjamas. He laid the pyjamas out on the bed. You could tell it was awkward for him to be sick.

"Name's Hill," he said. "This is the first time I've ever been in the hospital."

We nodded and gave our names.

He was a powerful-looking man: short, and broad in the shoulders. His hair was white and he had a moustache—a real forest of hair between his nose and his mouth—that went right on out to the grin lines of his cheeks. Since he grinned most of the time, he looked like a friendly walrus—with blue eyes.

"Fact is," he said, "this is the first day I've really been sick since they opened up Oklahoma."

"What's the matter with you, Mr. Hill?" Reverend Pearson asked from the next bed.

"Kidneys don't percolate right," Mr. Hill said. "But I reckon a pair of kidneys that last 75 years are doing right well even so. Team of horses don't last near that long."

He scrunched up his face and looked at Reverend Pearson.

Reverend Pearson sort of blinked his eyes. He generally does that when he can't make up his mind what kind of expression he ought to get on his face.

"Yes, sir," Mr. Hill said, "this is the very first time in my life that I haven't been able to go to the bathroom."

Reverend Pearson didn't say anything. He kept his face stiff as a poker. Mr. Hill laughed to himself sort of easy, loaded up his pipe, and said, "I reckon when a man gets in the shape I'm in, he isn't much account. Old Doc Meaders could have pulled me out of this, but I don't know about these doctors nowadays. Doc Meaders died in 1923, right after he treated my youngest one, James, for the typhoid fever. Had a lot of typhoid in those days on account of the shallow wells we dug."

Then Reverend Pearson told him about his operation. It was some operation. They fished around in him for better than two hours before they found his appendix. Finally, they found it wrapped up around his liver and backbone. The doctor let on like this wasn't the proper place for an appendix to be.

"You know," Mr. Hill said, "when it comes to an operation like that one, I think I'd rather have me a plumber doing the work just to be sure all my pipes were hitched up right again."

He rared back and laughed. Reverend Pearson didn't move. He was as stiff as a blackjack oak on a January morning.

About that time the head nurse came in, a woman name of Miss Gaylord. She heard what Mr. Hill said, but she didn't let on like it. Fact is, she's worried to death most of the time about being 65, because the hospital is going to retire her next year whether she's got a hankering to retire or not. She really isn't a bad woman, Miss Gaylord isn't. But being a Miss, she's sort of missed out on things.

"Is there anything we can do for you, Mr. Hill?" she asked. Sounded real professional. Right out of the icebox.

Mr. Hill nodded at a bunch of roses in a vase.

"You can take them out of here if you want to. Never had any use for roses, anyhow. My wife—buried her in 1933—she worked for 37 years raising her a batch of roses right next to the house. Probably took ten years off her life."

Miss Gaylord stiffened her back and picked up the vase and left.

IT must have been two or three days later when Reverend Pearson called my attention to the way the old man would go into the clothes closet right next to his bed. He'd go in there at ten o'clock sharp every morning and stay there for about five minutes. Then he'd come out. Reverend Pearson said it must be the old man's second childhood or something. Regular as clockwork, Mr. Hill would go into the closet and stay there for five minutes.

Miss Gaylord said it was on account of his age.

"He is 75 years old," she would say.

Mr. Hill's kinfolks came by every night. There were so many of them that I counted to 27 and then got mixed up because they wouldn't hold still. Old man Hill was the presiding elder in that congregation.

It was about that time that Reverend Pearson wasn't doing so good. He had so much gas around his stomach that he couldn't breathe right, and they had a contraption rigged up by his bed to pump the gas out. Didn't do much good on account of he kept swelling up like a balloon. I got worried about him. They were giving him shots in the arm and they fed him with a needle stuck in his arm. He couldn't sleep much, either. The thing that bothered him most, though, was to see Mr. Hill go into that closet come ten o'clock in the morning. It sort of got on your nerves. Made both of us jumpy. Why should he go into the closet like that?

Reverend Pearson was really sick. He got to talking to me about his church. Sooner or later they all talk to me.

Anyhow, Reverend Pearson said, "They're about evenly divided. Half of 'em are for me, and the other half think I'm preaching the wrong doctrine."

I just lay there. Mr. Hill was listening, too, and that sort of bothered Reverend Pearson.

"I wouldn't be surprised," he said, "if they either get rid of me, or half of 'em leave and organize another church."

Mr. Hill got up, combed his hair, smoothed out his pyjamas, and went into the closet. It was straight up ten o'clock.

Reverend Pearson looked at me, and I looked at him. He'd been turning sort of yellow, the same color as the stuff they were feeding him. He had the worst complexion I've ever seen on a man. That night he pushed the button and called Miss Gaylord in. He let on like there was something wrong with the pump, but I'd been watching him for some time, and what he was really afraid of was that he would die.

Every doggoned morning Mr. Hill would go into the closet at ten o'clock. It was making the whole ward jumpy. I even thought about asking Miss Gaylord to put him in another ward.

Miss Gaylord would come tiptoeing through the ward. When that woman tiptoes, it's just like a death sentence. She can tell. For two or three days Reverend Pearson just lay there sort of in between being alive and dead. Couldn't seem to make it either way. I've seen 'em get hung up like that, and sometimes it lasts for a week or ten days. I'd known Reverend Pearson a long time, and I hated seeing him go the hard way. We grew up together on the same section of land in Cleveland County.

Well, sir, it must have been the weather. It cleared off and stopped snowing. Reverend Pearson began to take an interest in the sparrows in the tree outside the window. He even tried to lift his head up a little higher on the pillow. That's how I knew he wasn't going to die. And that night Miss Gaylord sat right there by his bed. She nursed him. She fixed the bed clothes. She fed him. First time she'd ever paid that much attention to him. Day after day, old man Hill kept on going into the closet just like it was nothing unusual.

Reverend Pearson finally felt like talking, and he said, "I know now what I'm going to do about the church. I'm just going to preach the best I know how. If the Lord intended for me to preach something else, He would tell me to preach something else."

Miss Gaylord sort of surprised us, too, around then. She got her a job with the new hospital that was being built. It was so new that they didn't even have any regulations about when the nurses had to retire. She looked ten years younger.

OLD man Hill was leaving the hospital, going to the city to see if a specialist could tell him what was wrong with his kidneys. All his kinfolks showed up. He was grinning just like he did the first day he came to the hospital. His kidneys may have been in bad shape, but the rest of him was in perfectly good health.

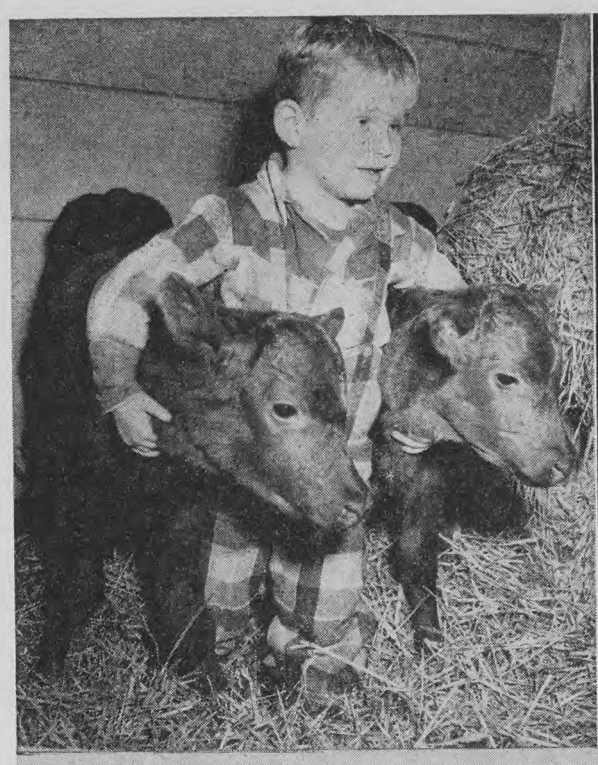
After he left, one of his daughters was still in the ward packing up his things. I knew that if I didn't ask her, we would never know. So I asked her, "Why does your daddy go into the closet every morning at ten o'clock?"

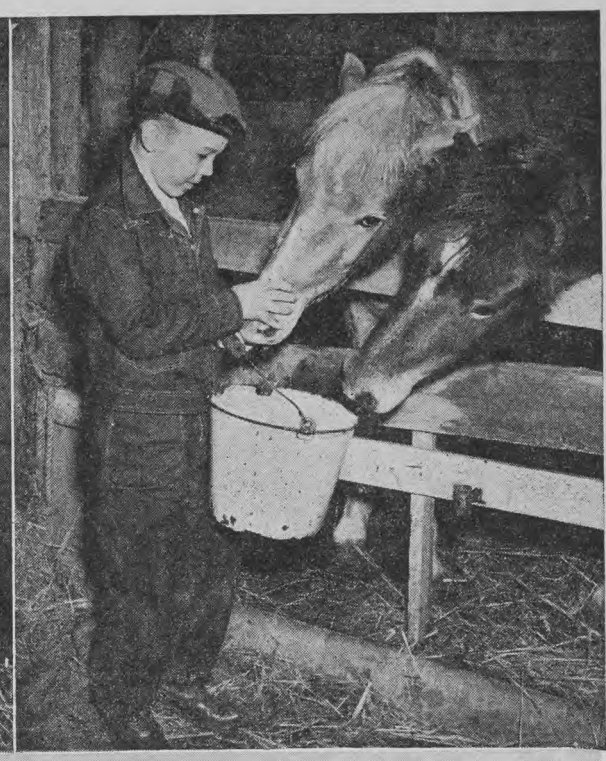
She studied it for a minute like maybe she didn't know whether we'd understand her or not. She quit smiling, and I wished I never had brought it up. Looking at me real steady, she said, "Papa prays."

"Prays?" Reverend Pearson said.

She said it real slow: "Yes. Papa prays for everybody around him. And the Lord has given Papa everything he ever asked for."

Then she picked up the suitcase and left. It was real quiet. The ward seemed so empty that Reverend Pearson turned on the radio just so we could have some racket.





Young Farm Folk and Their Friends

Photos by
Eva Luoma, Nicholas Morant, Don Smith, Bob Taylor

Under the Peace Tower

by **HUGH BOYD**

JULY is normally a hot and sticky month in the Ottawa Valley, and while there have been exceptions, it certainly lived up to its reputation this year. Parliament makes a conscious effort to wind up its business before the hot days of July. It failed to do so this year, because of the virtuoso performance of George Drew and his followers in filibustering against a no-time-limit on the sweeping powers in the Defence Production Act.

This was the most impressive contribution to the system of parliamentary government made by the Conservatives in years; and, if the importance of the principle at stake is appreciated in the country at large, it will enhance their prestige (which, it must be admitted, could stand enhancing).

The fireworks in the Commons completely took the spotlight away from another affair which was just getting under way within half a mile of that place. Yet this other may mean a good deal to Canadians, too, because there are very practical issues involved, and they seem likely to be debated hotly from coast to coast, as the months go by.

THE Royal Commission on the Coasting Trade opened its hearings in the same room of the Supreme Court building where the Turgeon Commission on transportation used to work so doggedly. As on that earlier occasion, the public stayed away in droves. (Even a member of the Supreme Court didn't know what was going on on the other side of the opened doors, until he was told—and then he didn't seem much impressed.)

Again there were three commissioners on high, with a judge in the middle, as chairman – no robes, no starchiness, but an air of knowing what it was all about, to impress the most self-assured expert witness. And in the body of the courtroom, as before, a small group of specialists and other interested parties.

I never think of the future. It comes soon enough.—Albert Einstein.

Among the latter, on this occasion, was to be noticed Dr. "Ernie" Hope, farmer in his own right and economist for the Canadian Federation of Agriculture. His presence, though just as a spectator at the moment, was enough to indicate that this affair held some interest for others besides the cluster of shipbuilders, owners, captains and affiliates.

This enquiry into what seemed to be a purely marine matter, actually affects the whole country; and the West no less than any other region. For the shipbuilders and some other groups – including labor and, with some reservations, the railways – are asking that Canadian ships should have a virtual monopoly of business as between one Canadian port and another. Their concern is with the situation when the Great Lakes-St. Lawrence Seaway is completed; when ships from other countries will be able to penetrate far inland. The villains of the piece, as some see it, will be the British, because a Commonwealth agreement allows them to pick up and lay down cargoes between one Canadian port and another, on the same terms as Canadian vessels. The British are formidable competitors because their ships cost less to build and less to operate—on account of lower wages. So the idea is to cut them out of the port to port traffic entirely, or at any rate, to make it more difficult for them, through protective devices.

THE result could well be to throttle competition to such an extent as to wipe out most of the expected advantages of the Seaway, as far as the West is concerned. The railways want British competition curtailed, and the C.P.R. is suggesting that if this doesn't happen, the consequent loss of business would warrant a renewed assault on the Crow's Nest Pass grain rates.

The chairman of this enquiry is Mr. Justice W. F. Spence of the Ontario Supreme Court, who, at an early stage of the proceedings, confessed that he was an old-fashioned believer in the power of competition to keep down costs. He pointed out that if the restrictionists had their way in the matter of suppressing British competition on the Great Lakes, they might also succeed in pushing the British out of the Newfoundland-Mainland trade, to the disadvantage of Canada's tenth province. (How would Premier Smallwood, who has been growling about getting out of Confederation, react to that sort of deal?)

The shipbuilders say that their industry must be preserved, because it is necessary to national defence. The shipowners make a similar claim on behalf of a Canadian merchant fleet—both sea-going and Great Lakes—, but they appear much more reluctant to suppress competition, than are some of the other people. Counsel for the Commission has been sounding out the various parties—including the railways—on how they would feel about subsidies from the Treasury, instead of trade restriction, in case competition from the British becomes too tough. Perhaps that will be the solution in the long run. V

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NEWS OF AGRICULTURE

O. S. Longman (right) now retired as deputy minister in Alberta, was the first western-born deputy minister of agriculture. His successor, R. M. Putnam (left), born 1905, is the first Alberta-born deputy the province has had.

O. S. Longman, Alberta Deputy, Retires

O. S. LONGMAN, born near Carnduff, North West Territories, December 30, 1889, retired as Deputy Minister of Agriculture for Alberta, on June 30.

The first western-born deputy minister of agriculture to have served in western Canada, it is at least a coincidence that Dr. Longman should have retired in the year of Alberta's Jubilee Year as a province. It is no less noteworthy that, with the exception of two two-year periods, he has spent all of his working lifetime since his graduation in agriculture from the University of Manitoba in 1913, in the service of the Alberta Department of Agriculture. Beginning in 1913 when Alberta's schools of agriculture were established, Dr. Longman served as instructor, first at the Claresholm School and later at the Olds School of Agriculture. In 1917, he married Miss Edith Barber, of Claresholm, after which he began a two-year farming stint in Manitoba. During the 1920-31 period he was principal of the School at Raymond. During 1931-32 he conducted a special investigation for the Alberta government into the problems of farmers in the C.P.R. irrigation system and the drought area. He then served as field crops commissioner until 1942, when he became deputy minister. During his service with the Department he has served under eight of Alberta's nine ministers of agriculture, and acquired a reputation for sound, progressive thinking and unselfish devotion to the land and its people.

In addition to the high regard in which he is held by those who know him, the value of his work has been recognized officially, by an M.B.E. in 1946; by a Fellowship from the Agricultural Institute of Canada in 1948; and by the University of Alberta, which conferred the Honorary Degree of Doctor of Laws on him, in 1954. At retirement, he was also a member of the Advisory Committee under the Agricultural Prices Support Act, and a member of the executive of the National Advisory Committee on Agricultural Services, as well as a member of the Advisory Committee to the Alberta Research Council and Chairman of the Board of Agricultural Education under the Alberta Agricultural Schools Act. In addition he is a life member of the Agricultural Institute of Canada and a member of the Soil Conservation Society of America.

By a further coincidence Dr. Longman is succeeded as Deputy Minister by R. M. Putnam, born in Medicine Hat, Alberta, 1905. Thus, in Alberta's Jubilee year—and his own—he becomes the first Alberta-born deputy minister of agriculture. Mr. Putnam is a graduate of the University of Alta., 1931 (B.A.), and 1933 (B.Sc. Agr.—Governor General's Gold Medal). He also took post-graduate work at the University of Wisconsin, receiving his M.Sc. in rural sociology and agricultural extension in 1944. He taught school for several years and has been with the Alberta Department of Agriculture in various capacities since 1930, as weed inspector, fieldman, Field Crops Branch, Director Agricultural Extension Service, Superintendent Agricultural Schools, and since 1945 as Assistant Deputy Minister. V

Saskatchewan Appointments

A. F. SHAW, Assistant Director, Agriculture Representative Services in the Saskatchewan Department of Agriculture since 1951, has been appointed executive assistant in the Department, to succeed C. M. Learmonth, who retired at the end of June. Saskatchewan-born, Mr. Shaw has combined university education, overseas service in World War II, work under the Veterans Land Act and service in the Saskatchewan Department of Agriculture during his lifetime. He served for four years as agricultural representative at Maple Creek, before moving to Regina as the assistant director of the Service. V

B. A. Cooke, chairman of the Saskatchewan Provincial Milk Board, retired on July 1, after long years of service in the Dairy Branch of the Department, before becoming chairman of the Milk Control Board.

Mr. Cooke is succeeded by J. E. Ridley, who also has been with the Department for 28 years. Ontario born, he was graduated from the Ontario Agricultural College in 1927 and spent the first few years of his service with the Department in the Prince Albert district, later becoming supervisor of herd improvement services and still later assistant dairy commissioner. V

NEWS OF AGRICULTURE

Get It At a Glance

Facts, curiosities and other odds and ends, in capsule form

Nearly all of Central America, including Mexico, Guatemala, El Salvador, Honduras and Nicaraugua has been affected by a combination of drought and decreased acreages of corn and beans, which are staple crops. Countries most seriously affected and faced with food deficits are Guatemala, El Salvador, Honduras and Costa. V

Saskatchewan credit unions according to Dr. B. N. Arnason, deputy minister of co-operation, show an increase in share capital of $1,316,896 during the six months ended March 31, 1955. Total assets are more than $29.5 million and liquid assets equal 27 per cent of the total. There are 280 credit unions in the province, with a total membership of 77,528. V

India produced 66 million tons of food grains last year, exceeding her Five-Year Plan target for 1955-56 by 4.4 million tons, and showing an increase of 7.9 million tons over the 1953 crop. This large increase in home production has resulted in a drastic reduction in food imports. V

A daily loss of from 700 to 800 calories per person between the food bought and the food consumed by American citizens, is reported by the U.S. Department of Agriculture. A survey of household, institution, and restaurant kitchens has been suggested to see if the loss occurs in spoilage, preparation and cooking, or in food left on plates. V

An annual wheat surplus of about 73.4 million bushels is expected by France for the next few crop years. Most of this will be marketed in Western Europe, especially West Germany. V

Saskatchewan health authorities warn that the bite of a mosquito can carry the virus causing western equine encephalomyelitis in horses, to human beings. In 1941 there were 543 cases of this disease reported in Saskatchewan, and 44 persons died of it. Infants up to two years of age and adults past 50 suffer most. The mosquito spreading the virus breeds in roadside ditches and usually appears early in July. V

The number of laying hens on Canadian farms was higher during the first five months of 1955 in all provinces, than in 1954. Egg production, however, was higher only in Ontario and the western provinces, and lower in Quebec and the Maritimes. V

Two orange trees have been growing in an Idaho mine about 3,000 feet underground. Both are presumed to have germinated from seeds dropped on the rocky floor. One is about four feet high. V

Russian scientists now claim that grapes, cherries, corn, cabbage, carrots, onions, apples, raspberries, currants and lemons are being grown in the far north of that northern country. They envisage, for the future, huge greenhouses heated and lighted by cheap electric power, and operating to produce fresh fruits and vegetables the year round, at the rate of three crops per year. V

The Ontario Agricultural College and the agricultural representatives of the province have combined to establish an insect warning service for Ontario farmers. This year plant lice are attacking spring grains and the army worm, which was very serious in 1954, is being carefully watched. V

Saskatchewan now has some 75,000 individual locker renters, who stored over 21 million pounds of foodstuffs in 1954. Since 1946, a total of 220 locker plants have been licensed in the province, by the Locker Plant Licensing Board. V

Researchers of the U.S. Department of Agriculture have developed superconcentrated grape and apple juices that can be kept on a pantry shelf for at least a year without spoiling or losing flavor. Because they can be stored without refrigeration, the new concentrates are expected to cut the cost of such juices on the housewife's budget. V

Budget for the French Ministry of Agriculture for 1955 has been set at $300 million, an increase of 17 per cent from 1954. An important feature of the new budget is the provision for 200 new agricultural advisers who will work with the departmental advisory services in the more backward areas. V

The Danish Government has authorized nonfat dried milk imports from dollar countries for use as animal feed. Reason for the relaxation of the dollar trading ban is a scarcity of protein feed in Denmark because of a bad harvest. Breakdown of Russian-Danish trade negotiations which cut off oilcake imports from the former was another reason for the move. V

Sweden has had a higher rate of economic growth during the last 70 years in per capita income, and has suffered less from cyclical setbacks, than the United States, in spite of the latter's highly dynamic economy. V

Overproduction and weak prices are causing trouble in the French dairy industry. Stocks on hand at present consist of 15,000 tons of butter, 4,000 tons of milk powder, 1,000 tons of casein, and 2,000 tons of cheese. In the past few months the government has spent $6 million to subsidize butter exports. V

Record corn yields have been posted by three Wisconsin farmers who followed a fertilizer and crop management formula given them by soils and crop specialists of their state university. Lawrence Gunnelson of Jefferson County, Joe Caine of Dane County, and Robert Schaller of LaCrosse County produced 219.7, 215.8, and 208.2 bushels per acre, respectively. The 1954 high was 169 bushels, and that of 1952 only 157 bushels. V

LIVESTOCK

[Guide photo

Sheep on range at Piapot, Saskatchewan.

Returns from Wool Can be Increased

DURING the past few years the average sheep owner has claimed 70 per cent of his sheep receipts from lambs and only 30 per cent from wool. The result has been that emphasis has shifted even further toward increasing lamb production. Although this is understandable sight should not be lost of the possibility of increasing the returns from wool.

The market value of wool can be increased by the improvement of the quantity, quality and uniformity of wool from the individual sheep, and also by the proper preparation of wool during and after shearing.

Raw fleece weight is a good index of clean wool production, according to S. B. Slen, Lethbridge Experimental Station. The weight measures the combined effect of fibre fineness, staple length, and density of fibres on a given skin area. The most accurate culling of a flock can be done at shearing time by weighing the fleeces and marking the low-producing ewes for shipment. If this is not practical an alternative is to handle the ewes in the fall and cull those with short-stapled, off-type or poor quality fleeces.

To ensure that the wool is properly prepared to command top prices, the floors in the holding pens should be slatted to keep the fleeces clean, prior to shearing. Sheep should be shorn on a solid board platform so that the wool may be kept clean during this operation. Wet tags should be removed before tying the fleece, to prevent damage to the surrounding wool and a lowering of fleece value.

Strawy, burry and chaffy fleeces are degraded. If the affected parts are separated out by the producer, only those parts removed will be downgraded.

The fleece should be folded in such a manner that when it is rolled from breech to neck, it will present a compact and attractive package to the buyer. The rolled fleece should be tied with a paper twine, and never with binder twine. Any black sheep should be shorn after the main band, and their fleeces packed separately.

The largest returns may continue to come from the lambs, but important supplementary returns that can make the difference between profit and loss, can be gained from efficient wool management. V

A Place For Crested Wheatgrass

GEORGE and Neil Fawcett find crested wheatgrass a well-adapted crop on their farm in the special area of Alberta west of Consort. It fits into their grain and livestock program, as well as providing 200 or 300 acres for a lucrative seed business. They farm about 2,500 acres, and run a herd of about 85 Shorthorn cows. Their wheat-fallow rotation is stabilized by moving the crested wheatgrass gradually through every field on the farm. The grass yields about 200 pounds of seed to the acre; and this year,—one of the better ones, marketwise—, it was worth about 20 cents a pound. In harvesting the seed last year, they pulled a buncher behind the combine and the cattle did well during the past mild winter, eating the bunches right in the field.—D.R.B. V

Beef Cattle Need Minerals

MINERAL elements correctly fed tend to maintain farm animals in health and promote the normal functions of the body in growth, production and reproduction. Twelve to 15 minerals appear to be essential, but according to the Experimental Farm, Brandon, Manitoba, less than half of these are likely to be lacking in common Manitoba feeds.

Sodium and chlorine (common salt) should be supplied for all classes of stock; and in areas of iodine or cobalt deficiency, iodized or cobaltized salt also should be provided. Calcium and phosphorus are the other elements most likely to require supplementation, and the amount needed will vary with soil conditions, type of ration and level of production.

Forage grown in many areas of Manitoba is likely to be low in phosphorus because of soil deficiencies in this element. Rations with a high roughage content are likely to be short of phosphorus, while calcium is likely to be lacking in rations containing large proportions of grains. The needs of nursing cows for minerals, particu-

larly calcium and phosphorus, are above normal, and an adequate supply is essential for optimum breeding results.

Rations for wintering beef cattle, particularly where a large proportion of grass hay is used, should be supplemented with bone meal to provide needed phosphorus. A breeding herd on pasture should also have bone meal available. For cattle on full grain feed, calcium is more likely to be required, and can be provided in the form of ground limestone.

Mineral mixtures may be self-fed, because once deficiencies are overcome animals will eat only a few ounces per head daily. V

More Pigs From Gilts

BIGGER litters from young gilts result from growing the gilts out on a limited ration, and flushing them with full feeding two or three weeks before breeding. "This management and feeding technique results in the production of more fertilized eggs with resulting larger litters," explain swine specialists at the University of Wisconsin.

It has been established that if a gilt has more heat periods before being bred, additional eggs will be produced by the ovaries at breeding time. The specialists at Wisconsin set up tests to try and find how to get more heat periods, and to determine the stage of the heat period when the most eggs can be fertilized. In feeding tests they found that gilts receiving two-thirds as much feed per day as full-fed gilts, reached sexual maturity five to 25 days sooner. The earlier maturing gilts could have more heat periods before the breeding season.

Research has also shown that there will be more fertilized eggs when gilts are bred early in the heat period. Gilts bred during the first day of heat, and again 24 hours later, seemed to have the largest litters. Other tests indicate that breeding early in the heat period may reduce the number of sows that return to heat and require re-breeding. V

Phosphorus For Daily Gain

THERE is a valley in southwestern Montana,—the Big Hole Basin—, that grows hay with an unusually high level of phosphorus. Steers fed on the hay from this valley will fatten as well as steers fed grain in most other areas.

The 30 by 15-mile valley is at an elevation of over 6,000 feet. Its soils contain two or three times the normal amount of soil phosphorus, and the hay grown on it is also unusually high in this energy and growth-promoting element. The extra phosphorus in the native hay is credited with the effectiveness of the hay for fattening cattle.

That part of Montana that includes the Big Hole Basin was recently visited by H. J. Hargrave, Lethbridge Experimental Station, and he reports that experimental results at the Montana Agricultural College, Bozeman, confirm the experience of ranchers in the Big Hole country. Six hundred pounds of a ration containing an adequate level of phosphorus put 100 pounds of gain on yearling steers; a similar ration, but with a low phosphorus content was fed to a similar group of steers, and they required over 1,900 pounds of feed to produce 100 pounds of gain. Phosphorus was the key element in this very wide variation.

In southern Alberta, a high percentage of the native and cultivated forage crops are deficient in phosphorus during six to eight months of the year. Only during the active growing months do the majority of forage plants contain an adequate amount of this element, that is so essential for the development of growing animals.

The inadequacy of the supply of phosphorus in many native grasses during a large part of the year, coupled with experiences in Montana, points to the importance of maintaining a high phosphorus level throughout the year. Money spent on a high-phosphorus mineral supplement during the fall and winter months is likely to return substantial dividends. V

Breed Heifers on Basis of Growth

FEEDING and managing dairy heifers to give them sufficient growth is recommended by the North Dakota Agricultural College. "The idea is to begin good dairy heifer management with the calves," they say. "By avoiding the usual calf troubles, young heifers are not stunted in growth. As yearlings, and up, avoid skimpy pastures and poor hay, to give the heifers a chance to reach maximum size for their age."

The age and weight suggested for breeding for the different breeds are: Brown Swiss, 19 to 23 months, 800 to 850 pounds; Holstein, 18 to 20 months, 845 to 912 pounds; Milking Shorthorn, 18 to 21 months, 650 to 700 pounds; Red Poll, 17 to 21 months, 650 to 700 pounds; Ayrshire, 17 to 19 months, 697 to 758 pounds; Guernsey, 16 to 18 months, 605 to 663 pounds; Jersey, 15 to 17 months, 530 to 580 pounds. V

Loose Housing Or Stanchion Barns?

THE labor required on 10 dairy farms using the loose housing system was studied by the Economics Division, Canada Department of Agriculture. Analysis revealed that 14 per cent less time and 27 per cent less travel were required annually in loose-housing, compared with stanchion-type, barns.

The major differences in favor of loose-housing were found in savings in winter dairy chores, during which loose housing required only about three-quarters as much time and three-quarters as many steps to care for 20 milking cows and 30 cow equivalents. During the summer months six per cent more chore time was needed in the loose-housing system. This difference in time was due mainly to the fact that the cows moved slowly into the stalls at milking time.

In spite of this time loss in the summer, less labor was required, on the average throughout the year, to care for a herd when loose-housing was used. V

FIELD

[Guide photo

Straw from the combine is chopped and hauled to the barn for winter bedding on the Sam Gurr farm at Hamiota, Manitoba.

Cover Crops For Fall Pasture

COVER crops, if they are to do the best job of protecting the soil against erosion, should not be grazed to the point where there is little or no cover left. A. D. Smith of the Experimental Station, Lethbridge, Alberta, points out that average annual rainfall in the Claresholm and Pincher Creek districts is approximately 18 to 21 inches a year, and suggests that if the crop is grazed enough to prevent it from reaching the shot blade stage, no significant reduction in yield will occur in the succeeding crop. In areas where the average annual rainfall is less, cover crops have reduced the yield of succeeding crops.

Oats seeded at one bushel per acre in late July, on summerfallow, have provided good fall pastures and protected soils from erosion, at the Claresholm and Pincher Creek substations. The cover crop has been ready for pasturing some six weeks after seeding, and one acre will pasture one mature beef animal for about six weeks. Average daily gains have been from one-and-one-half to two pounds per day.

Spring wheat, oats, barley, fall rye and winter wheat have all been tested for planting as a cover crop. Oats are recommended because of their disease resistance, palatability, and relatively high yield of forage. Early-seeded fall rye has been pastured in the fall and early spring and a good crop of rye seed harvested. V

Blast Of Oats

A CONDITION known as blast of oats is quite prevalent in some seasons and may lower yields very materially. Blasted oat spikelets possess no kernels, and the chaff is reduced to a thin, papery structure, or may even be lacking. A third or more of the head may consist of these sterile, non-productive spikelets.

It is frequently thought that blast is caused by a fungus or other disease organism. Actually, according to workers at the Experimental Farm, Brandon, it is largely influenced by early growth conditions affecting the oat crop. Blasted spikelets are not destroyed after they are formed, but, rather, stop developing at some stage before they have completed normal growth.

Any factor or condition that has an adverse effect on the early development of the oat crop will increase the incidence of blast. Exposure to drought, critically high temperatures, root rot, rust, nutrient deficiencies (especially of nitrogen), or other adverse factors, will tend to aggravate the situation and increase blast.

The only form of control measure is to provide the oat plants with growing conditions as favorable as possible. Early seeding has been found beneficial because it allows the crop to make the best use of spring moisture and complete more growth during the cooler part of the season. V

Barley Diseases

BARLEY, of all cereal crops, is the one most subject to the destruction of the leaves by plant diseases. H. A. Wallace of the Plant Pathology Laboratory, Canada Department of Agriculture, Winnipeg, reports that recent studies show a heavier infestation of leaf diseases in Manitoba than in the areas further west.

The most promising method of countering the diseases appears to be the production of new barley varieties resistant to these plant diseases.

The browning and withering of barley leaves, frequently seen just after midsummer, is caused by several kinds of fungi. These fungi reproduce by developing large numbers of small bodies, called spores. The spores survive the winter on straw and leaf fragments and develop infections on new plant growth in the spring. High rainfall and humidity favors infection, which is one reason why Manitoba is more heavily infested than the provinces further west. Also, barley has been grown extensively over a long

period in Manitoba, and the disease has accumulated over the years.

Combining the crop distributes the crop residues evenly over the field. This sets up conditions very favorable to the development of harmful fungi, especially if barley follows barley on the field. Not spreading trash might help control, but the Laboratory does not recommend this procedure because combining is the most satisfactory method of harvesting.

It is only recently that consideration has been given to varieties resistant to leaf diseases, and their use as parent types in breeding programs. Rust and smut resistance in barley has been greatly improved by breeding. Mr. Wallace believes that there is no logical reason why the same result cannot be achieved where leaf diseases are involved. V

You Can Control Wild Oats

by L. H. SHEBESKI

Chemical Control On the Way

HALF a million acres of Manitoba farm land were not seeded this year because of flooding. Thousands of additional acres were not sown until late June for the same reason. Farmers afflicted by these unusually wet conditions, or farmers who practised delayed seeding only to be caught by aphid damage in their late-seeded barley, may find their faith in the recommended cultural method for wild oats control rather badly shaken. They will welcome, as will all of us, a practical method of control by chemicals.

A number of new chemicals now under test appear particularly promising. At least one of these has been giving excellent control of wild oats at Winnipeg in sugar beets, field peas, rape, soybeans and sunflower. Two of the new chemicals seem to possess the ability to knock out wild oats without damaging flax or barley.

Since the experiments are conducted under ideal conditions, further testing is necessary, particularly on land with a heavy trash cover in which it would be difficult to mix the chemicals with the soil. Tests also must be made with these chemicals on a variety of soil types and under different and varying climatic conditions before the chemicals can be recommended for use on farms.

However, in spite of these reservations, I do feel confident that within a year or two we will be able to recommend chemicals for the control of wild oats under a wide range of conditions.

(Wild oats control is becoming an increasingly important problem. For this reason, The Country Guide has invited Professor L. H. Shebeski, head of the Plant Science Department of the University of Manitoba, to provide our readers with suggestions, from time to time, for the control of this costly weed. Each article will be short and practicable; and the suggestions offered will be sufficiently timely to permit of immediate use.—ed.) V

HORTICULTURE

Seven horticultural short courses were conducted throughout Saskatchewan this spring, with good attendance as suggested by this group at Sturgis.

Short Courses In Horticulture

by **D. R. Robinson**

DURING March and April, 1955, seven horticultural short courses were held in Saskatchewan under the direction of the University Extension Department. (One additional short course was held at Indian Head under local sponsorship.) Seven horticultural societies and one agricultural society (Moosomin), served as sponsors for these short courses on home gardening. In addition to the communities mentioned above, the following centers participated: the Battlefords, Melfort, Canora, Kamsack, Pelly and Sturgis.

Keeping in mind the large number of new homes built in recent years, the landscaping of urban grounds was emphasized in the lectures given at these courses. For the most part the short courses operated for either two or three evenings. Two illustrated lectures were given each evening, and time was allowed for questions and discussion. The subjects dealt with were: the use of trees and shrubs in landscaping, perennial flowers, annual flowers, lawns, and vegetables and fruits for the urban garden.

The majority of the lectures were given by S. Sheard, provincial horticulturist, and the writer. Horticulturists at the experimental stations and the forest nursery stations assisted with the lectures, as did one agricultural representative and one professional gardener. Attendance at the short courses averaged 42. This was somewhat higher than had been anticipated, since only one of these courses was held in a city. With 25 active horticultural societies now operating in Saskatchewan, and because of the favorable response to these courses, the Extension Department of the University plans to offer a similar number of home gardening short courses in the spring of 1956.

(*Note: D. R. Robinson is extension horticulturist at the University of Saskatchewan.—ed.*) V

Outdoor Tomatoes For Christmas

DO you live where it is difficult and expensive to get fresh vegetables during the winter? If so, you may wish to try a suggestion made by J. A. Gilbey, officer-in-charge of the experimental substation at Fort Simpson in the North West Territories. Mr. Gilbey sends a reminder that it is possible for those who grow tomatoes, to store them to ripen (at some sacrifice of flavor), for Christmas. He says:

"Strong plants with a good yield of well-sized, mature, but green fruit, should be left in the ground, but protected from freezing each night by jute bags or canvas, until severe frosts threaten. Plants with fruits still attached are then lifted carefully and the roots wrapped with peat moss, and the whole plant suspended upside down in a temperature of about 45 to 50° F. with a high humidity (90 per cent relative humidity). Ripening fruits may be picked from time to time as they show color, and brought into room temperature to develop flavor."

He adds that it is very necessary to prevent frost damage before storage, and to handle fruits and plants carefully, with frequent inspection for diseased specimens while in storage. V

Fall Planting

THE fall planting season runs from late August, or earlier, to mid-October, depending somewhat on the area. Such bulbs as fritillaria, narcissus squill, and tulips are often planted about mid-September. A few herbacious perennials such as Oriental poppy, mountain anemone and iris, are best planted in October. Peonies and rhubarb are better planted in September, and sometimes fruit trees and some ornamentals can be planted to advantage in October, although there are some advantages in favor of spring planting, where time and labor are not too much of a factor.

It is an excellent idea to order, now, any woody plants, whether fruit trees or ornamentals. These are dormant by early October and can be shipped without wilting. Nurseries usually have a good selection and time to send them out in good condition. If they are not to be fall planted, a well-drained location should be selected and plants heeled-in for spring planting. Generally speaking, it is better to avoid ordering large plants, which must be pruned severely when set out. V

POULTRY

[Guide photo

Proper care and handling of eggs can mean as much as two cents per dozen more in net income.

Cooled Eggs Mean Extra Profits

POULTRYMEN can add to their incomes by making sure that eggs are properly cooled during the hot summer months. Consistent gains of one-and-a-half to two cents per dozen in net income can be realized in this manner. It is equally important to pre-cool the egg cases, for a warm case with filler and flats will absorb considerable water and defeat your cooling efforts. An egg contains about 75 per cent water, and the shell has 6,000 to 8,000 tiny pores which permit rapid evaporation of this water when room temperature is high and humidity low. Temperature and humidity, therefore, have a good deal to do with egg quality.

An ideal condition is to have a temperature of about 55 degrees F. and a humidity of at least 75 per cent. A simple and effective method for the small producer to cool and store eggs is to construct a wooden box large enough to hold two cases or two wire baskets. One end of the box should then be covered with coarse burlap, and the bottom or top end kept in a tray of water. Capillary action will keep the burlap moist and provide ideal moisture conditions, as well as cooling by evaporation. On the other end of the box, a fan should be placed, facing away from the cooler, so as to cause the moisture to be drawn through the cooling box. Producers having 750 or more layers, will find a mechanical egg refrigeration unit a worthwhile investment. V

Pole-Type Laying House

WE'VE been hearing a lot about pole barns in the last few years—now it's a low-cost pole-type building to house your laying flock. A structure made with poles and farm-sawn lumber is easy to build and just as efficient as the finest frame building, states Gerry Annin, poultry specialist at the University of Wisconsin, but the poles should be pressure treated with creosote so they'll last longer.

A 40 by 26-foot pole building, constructed one year ago at the Spooner Experimental Station to house a 300-bird laying flock, provides ample proof that hens don't need a structure with a concrete floor, concrete walls, or factory-sawn upright timbers. The Spooner building has poles placed eight feet apart on the sides, one pole in the center at each end, and a gable-type roof. Four two-by-eight planks are nailed to the poles around the bottom, with the lowest plank extending below the surface of the ground.

Insulation in the laying house is the bat-type. It was stapled to the outer siding after the latter had been nailed to the poles so that when the inner siding was added, it made a completely insulated double wall. Placed eight feet above the floor, the ceiling has one-inch shiplap nailed to the underside of two-by-eight joists; an eight-inch layer of shavings has been spread on the shiplap to provide more insulation.

The building is ventilated by a downdraft fan mounted in the center of the ceiling, which is controlled by a thermostat and time clock. Fresh air is brought in through louvres in each of the gabled ends. Large double doors, wide enough to admit a tractor loader, and located at one end of the house, provide plenty of extra ventilation during hot summer weather.

Feeders for the 300-bird Spooner flock are suspended from the ceiling; this allows them to be easily raised whenever litter accumulates. The building has community nests, but no roosts. One two-by-four-foot nest accommodates 75 laying hens. Eggs and feed are both stored in an eight-foot room located at the opposite end of the building to the large double doors. V

Treating Poultry Roosts

BY treating poultry roosts with a wood preserver once a year, you can get rid of mites, but it should only be used when you're cleaning out the poultry house. That way, the preserver will get a chance to dry before the hens get back on the roosts. If hens should carry it back to the nests, your eggs are liable to be contaminated and become off-flavor. For lice, you can paint nicotine sulphate solution on the roosts, or dust your hens with sodium fluoride. V

The Joseph G. Dusseault family of Vimy, Alberta, didn't become a Master Farm Family by neglecting farm bookkeeping. Here Germaine Dusseault, a graduate of the Vermilion School of Agriculture, helps father tally expenses.

Junior Farmers Aid Farm Accounting

Elgin Juniors launch their campaign for a completely equipped business center for every farm in the County

AN article by Gerald Inch in the "Junior Farmer News" tells of a project launched by the Juniors of Elgin County, Ontario, to encourage more farmers to maintain a proper system of keeping bills, correspondence, and livestock records in a handy, and orderly manner. They will urge each farmer to set up a "Farm Business Center" in his home, complete with such items of office equipment as filing cabinets, portable files, desks, and manila folders. As part of their project, they have arranged to purchase just about every type of office equipment that would suit a farm office, which they will sell to interested farmers at wholesale prices.

The Elgin Juniors are the first in Ontario to start such a venture. As their contribution to the 1955 Community Betterment Project, it has the support of local Department of Agriculture officials and many prominent Elgin County farmers. States the article, "The Juniors realize that few farmers have any orderly system of doing their business other than the calendar on the wall, the knick-knack in the corner, behind the kitchen clock, or just an ordinary spike on which to file important papers. All too often, when the hydro bill arrives, it is shoved into a miscellaneous drawer, after note has been made of the discount date on the calendar. The farmer doesn't realize in his haste that in another week or so he'll have more circles on the calendar than he has dates, and won't know whether the hydro bill, or 'Bessie' the cow, is due.

"Another example might be found when the fertilizer agent calls in the early spring to take orders. The average farmer doesn't know what analysis he used last year, or what quantity he ordered. If he had a file he could quickly refer to it, find out his requirements, and probably save $25 to $30 on discounts through early ordering. A saving on this one item could more than pay for a filing cabinet."

To promote the "Farm Business Center" project, the Juniors have presented a two-act skit, entitled "Mind Your Business," in several districts throughout Elgin County. Suggested farm office equipment is displayed, and the whole project is discussed during the same meeting. Nor have they forgotten the mediums of press, radio, and television in getting their message across to the farmer. There have been stories and advertisements in the St. Thomas Times, discussion periods over radio station CHLO, and a 30-minute telecast over CFPL-TV, London.

Although there has been a lot of interest in the project to date, the Elgin Juniors are far from finished with their promotion program. Throughout the coming months they intend to keep it in the forefront of their county's rural life. Their skit will be presented to many other senior farm organizations, and they'll also conduct a vigorous mailing campaign.

Elgin Juniors have always tried to live up to the Junior Farmers' motto of "Self-Help and Community Betterment," since they were first organized in 1922. In 1948 the County Association bought a stencil machine which they used to make stencils for transferring names to mail boxes, egg cartons, tarps, and mail cans, as a service to local farmers. Their most successful project was in 1952, when about 1,300 metal farm name signs were sold throughout the County, making its farmers among the best identified in Ontario. Last year's project was directed at farm entrance improvement and beautification, and co-operating with Kent County in the sale of "Slow Vehicle" signs to promote farm safety.

Their work for the whole community was recognized last June when they were named "County of the Month," by the Junior Farmer News. √

Kitimat grows

Already Alcan's big new West Coast smelter goes ahead with TWO major increases to meet the rapid growth in demand for Canadian aluminum

The broken lines on the photograph roughly indicate the additional area to be occupied by new smelters and other buildings. Beyond the present plant (the aluminum structure in the middle ground) can be seen the harbor and docks of Kitimat.

In August, 1954, only 3½ years after ground was broken, the Kitimat smelter commenced production of aluminum with an annual capacity of 91,500 tons. Almost immediately a 60,000-ton extension was started. And in the spring of 1955 the decision was made to proceed with a flexible program to add a further 180,000 tons to ingot capacity.

. . . A progressive increase to 331,500 tons, more than three times the size of the original installation, and well on the way to our ultimate Kitimat goal of 550,000 tons a year.

"This continuing expansion of Kitimat in successive stages", stated Aluminium Limited president Nathanael V. Davis, "should, we believe, help to keep pace with the growing free world demand for aluminum and particularly the demand in our major export markets, the United Kingdom and the United States."

The new facilities will go into production step by step, with the first unit starting up in the fall of 1956. It is expected that the present building program will be completed in 1959.

ALUMINUM COMPANY OF CANADA, LTD.

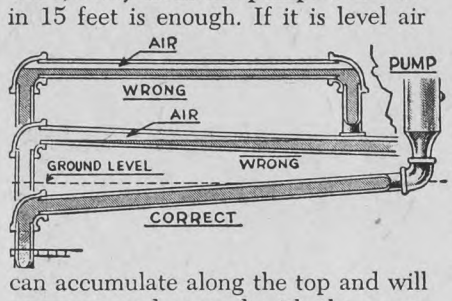
SMELTERS AT: SHAWINIGAN FALLS ARVIDA ISLE MALIGNE BEAUHARNOIS KITIMAT

WORKSHOP

Harvest Season Handy Ideas

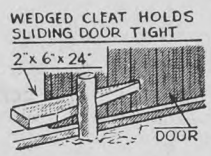
With harvest coming, ideas that save time and effort are particularly useful

Air Bound Pump. If there is an elbow between pump and water supply it is important that the horizontal pipe should be sloped slightly downward, away from the pump. One inch in 15 feet is enough. If it is level air



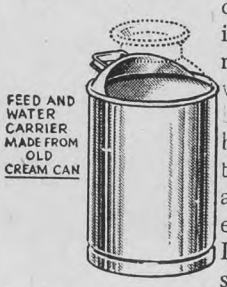
can accumulate along the top and will compress and expand with the pump strokes. If it is impossible to build the assembly with the pipe sloping, a tee and plug should be used in place of the first elbow so air can be released. —W.F.S. √

Door Held Snug. If the post at the back is put close enough to hold the barn door tight, the door often will not slide readily. I keep my sliding doors snug by keeping a wedged cleat handy, which I tap between the door and the stake when I open or close the door. √

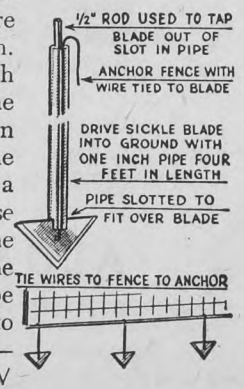


Useful Torch. A torch for lighting a number of fires, as when you are burning scrub or brush, can be made by tying a wrapping cloth around the end of a rod to make a large ball, then soaking it in fuel oil. The torch will burn for a considerable length of time.—O.T., Man. √

Feed Carrier. I converted a discarded cream can into a handy carrier for feed or water around the barn and chicken house. I cut the top, as shown, and smoothed the edge with a file. It can be cut at such an angle that the handle can still be used.—J.P.E., Alta. √

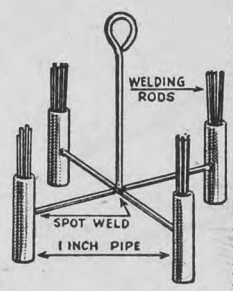


Fence Anchor. I use old sickle blades for anchoring woven wire fence, as shown. I fasten a length of wire to the blade, and then drive it into the ground with a slotted pipe. I use a rod to tap the blade out of the slot in the pipe after it is set into the ground.—J.A.E., Alta. √

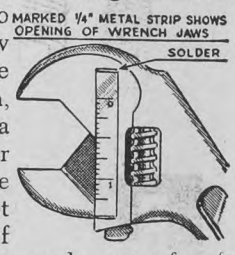


Heater Grate. If you can't get a grate for that old round fire-pot heater just take a worn binder or header bevel gear and use it. You will have to rivet or weld in a few more ribs to close up the spaces between, so the fire will not fall through. When you want to empty the ashes you can tilt the wheel with a hooked poker, and shake the ashes down.—E.L., Alta. √

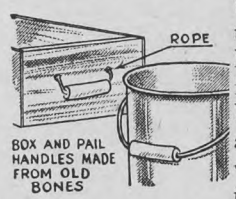
Welding Rod Carrier. The frame shown in the illustration is very handy for carrying welding rods to spots where you wish to work. Extra pairs of arms could be put in if more sizes or kinds of welding rod were wanted. P.A.T., Alta. √



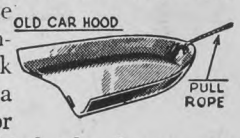
Rule On Wrench. A length of steel rule soldered to the stationary jaw of an adjustable wrench, as shown, lets you tell at a glance how far apart the jaws are set. If you do not have a length of rule one can be made out of soft metal, the distances being marked off with a metal scriber.—H.E.F. √



Bone Handles. Round pieces of bone can be cut to the right lengths and used for handles for buckets, boxes or anything else on which the original handle has broken. I use them all the time and find they work very well.—G.W.H., Sask. √

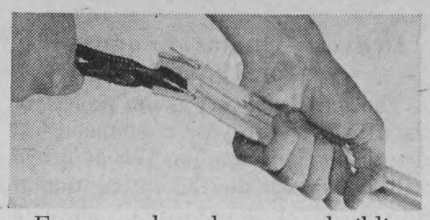


A Useful Slide. The discarded hood of a car, available for next to nothing in any junk shop, makes a good slide for transporting light loads. I use one for transporting ewes with new-born lambs. I move up to 300 pounds on mine, and can pull it with a rope when I am riding horseback.—E.G.O., Alta. √

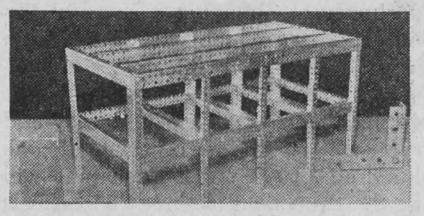


Pencil Sharpener. In the absense of a pencil sharpener in the workshop a fine point can be put on a pencil with a piece of fine sandpaper or emery cloth. I use emery cloth, drawn taut and tacked in place over a wooden block. O.T., Man. √

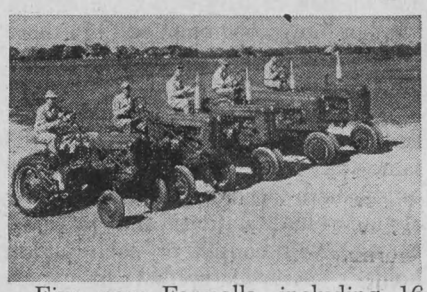
WHAT'S NEW



Farmers whose houses or buildings are not wired will, according to the manufacturer, be interested in a new product, electrostrip. It is a flexible, plastic wired molding which can be easily installed on any wall, baseboard or other flat surface. Fusable electric receptacle plugs snap in and permit plugging in electrical devices at any point. (Bulldog Electric Co.) (90) V



These steel framework angles can be used for building work benches, platforms, squeezes, or a number of installations around the farm, according to the manufacturer. With a series of round and elongated holes it is not difficult to make them fit, and the finished object is rigid. The angle iron comes in 11, 12 and 14-gauge steel, and the angle sizes are three inches by 1½-inch or 1½-inch by 1½-inch. (Structo Systems, Inc.) (91) V



Five new Farmalls, including 16 models, have been announced by International Harvester. They are the 1-plow Farmall Cub, the 1- and 2-plow Farmall 100, the 2-plow Farmall 200, the 3-plow Farmall 300 and the 4-plow Farmall 400. Fast-Hitch is available, also Fast-Hitch implements. (International Harvester Co.) (92) V

This gasoline powered lawn mower features twin, cup-shaped cutters which turn toward the center of the mower at more than 100 miles per hour. It is credited with going through weeds like a chain saw, and the manufacturers say it will cut right up to walls, fences, trees and other obstructions, and will trim over the edges of flower beds. Air suction lifts grass for cutting a 20-inch swath. (McCulloch Co.) (93) V

For further information about any item mentioned in this column, write to What's New Department, The Country Guide, 290 Vaughan St., Winnipeg 2, giving the key number shown at the end of each item, as—(17).

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MONTHLY

Delivery Quotas Announced for 1955-56

The initial delivery quota policy for the 1955-56 crop year announced last month by the Canadian Wheat Board will be similar to the initial quotas introduced at the commencement of the 1954-55 crop year. Initial quotas will take into consideration the monetary relationship between the various grains through the quantities of each kind of grain which may be delivered initially. Each permit holder, regardless of his acreage, will receive the same quota in order to assure him approximately the same cash return as other producers and an equal opportunity of obtaining a share of the limited space which will be available at most delivery points.

The initial delivery quota for wheat (other than Durum), oats, barley and rye will be the equivalent of one hundred (100) units. Each unit will be the equivalent of three (3) bushels of wheat or eight (8) bushels of oats or five (5) bushels of barley or five (5) bushels of rye. As space becomes available and as authorized each permit holder will be entitled to deliver any of these grains or any combination of these grains calculated on the unit basis not exceeding the equivalent of 100 units under the initial quota. Thus a producer will be entitled to deliver a maximum of 300 bushels of wheat, 800 bushels of oats, 500 bushels of barley, 500 bushels of rye, or any combination of these grains, the total not exceeding the limit of 100 units.

Following the initial quota a specified acreage policy of quotas on the same basis as in 1954-55 will be established. General quotas will apply at individual stations and specified acreage will consist of each permit holder's acreage seeded to wheat (other than Durums), oats, barley or rye plus his acreage in summerfallow in 1955.

Deliveries of Durum wheat and flaxseed will not be subject to quota control in 1955-56 and deliveries may commence after August 1, 1955, subject to space being available in country elevators. Deliveries may be made at any point where space is available but in the case of Durum wheat deliveries the permit number must be shown on the producer's certificate which is issued covering the delivery.

Since producer marketings of wheat have been relatively heavy in recent months it is the hope of the Board that farmers will show a preference for deliveries of oats and barley in their deliveries under the initial quota. In addition, the Board will consider applications from producers for permission to deliver one carlot of malting, pot and/or pearling barley in excess of the established quotas, subject to the following provisions: (1) That a representative sample of the carlot has been submitted and accepted by a maltster or shipper as suitable under the above qualifications, and (2) that a premium will be paid to the producer for the carlot of barley so accepted.

The Board warned, that while there would be a reduction in farm stocks of grain from the position a year ago, country and terminal elevators throughout Canada will again be well filled at the close of the current crop year. "This," states a Board circular, "means that the storage position will be severe again at the start of the new crop year on August 1, 1955, and for some time to come producers' deliveries will be related to the volume of grain which can be disposed of at home and abroad. Barring serious crop failure areas in 1955, producers' marketings in the crop year ahead will have to be spread out over the period of the crop year as they have been in the crop year which is almost completed." V

Canadian Wheat to Poland

Details of the arrangements whereby Poland will obtain 250,000 tons or approximately 9¼ million bushels of Canadian low grade wheat, after liberal treatment by the press, are well known to the majority of Western wheat producers. In brief, the deal involved a sum of $19 million, of which $3 million or 15 per cent of the total is to be paid in cash and the remaining $16 million payable within 15 months. Presumably the deal, which is being completed by a private grain firm, will be financed through the Canadian banks and the loan guaranteed by the Export Credits Insurance Corporation, a government agency established in 1945 to ensure Canadian exporters against non-payment by foreign buyers arising out of certain credit and political risks.

General approval by the press, the public and Western wheat producers is apparent but like all international transactions some criticism is certain to develop. Attacks against the deal with Poland have been waged on two basic contentions; firstly, the possibility that Poland will default on her payments, in which case a heavy loss would be borne by Canadian taxpayers, and secondly, that we should not extend credit to Iron Curtain countries when not providing equal concessions to Western wheat importing nations.

Any assessment of the credit risk must take into account the needs of Poland for food and her current credit rating. It is apparent that the need for food is great—a situation which might continue for a number of years under which circumstances it is unlikely the country would risk any deterioration in its international credit rating by defaulting on a first purchase. At the same time it may be recalled that Poland for a number of years has been enjoying mutual trade with several western European countries including Great Britain as a result of which her credit is reported to be high at the present time.

Official approval of the Polish wheat deal may be the government's answer to U.S. wheat disposal policies which are having some deleterious effect on Canadian wheat exports. How far the policy makers are prepared to go in guaranteeing credits for wheat purchases is not known but undoubtedly Canadian wheat producers applaud the action as a move in the right direction.

A few there are who seem to view an extension of trade with Iron Curtain countries as something politically and morally unsound, a thought which has become evident with an apparent

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keener desire on the part of the Soviet to develop and extend their trade relations with Western nations. However, peace and mutual understanding is never promoted by trade barriers and the purpose behind the Communist desire for greater trade can only be tested by actual participation in exchange of goods of non-strategic importance. While it may be difficult to define "strategic" goods accurately wheat can by no means be so classified unless it is purchased for stockpiling with hostile intent.

Considering the present supply position of wheat in Canada and in other exporting countries this country can be well satisfied to dispose of low quality wheat under the terms of the Polish deal. Whatever criticism may be uttered it must be remembered that this wheat was purchased at current price quotations and thus the deal bears no resemblance to a give-away program. V

U.S. Extends Restrictions on Rye Imports

By Presidential decision the United States government has reimposed restrictions on imports of rye and rye products into that country for a period of two years ending June 30, 1957. An annual quota of 3,350,000 bushels, the same quantities which have been in effect during the current crop year, has been established.

A proclamation issued by the President provided for the allocation of the quota on a historical basis which permits Canada a quota of 3,255,000 bushels and other foreign countries a total of 95,000 bushels.

The U.S. Tariff Commission which investigated the rye imports situation under the provisions of the Agricultural Adjustment Act recommended in its report to the President that a quota of 1,700,000 bushels be imposed indefinitely for succeeding 12-month periods. However, the President did not accept the recommendations of the commission apparently as a result of strong representations made by the Canadian Government. Canada's trade minister, The Right Honorable C. D. Howe, speaking on the subject in the House of Commons last month, stated:

> Strong representations were made to the President and the executive that this violated the traditional pattern of trade with the United States. The result was that the President did not act on the report of the tariff commission but has set the same quota as is now current, namely, 3,350,000 bushels per year. We were asked whether we would prefer a one-year quota or a two-year quota and under these circumstances the government suggested that a two-year quota would be preferable. We can live with the quota as established at present. Until the situation changes to the extent that the quota can be dropped, we think that a 3,300,000 quota is reasonable, representing about the average sales of rye in that market over the last ten years.

The great danger and therefore the principal objection which Canadian farmers may have to the imposition of such restrictions lies not in the quantities now established but in the principle of quotas. The principle of restriction by quota has been the subject of Canadian protest in Washington on a number of occasions but under the present surplus commodity situation in the U.S. the problems of the administration are very great. The great danger lies in the establishment of a precedent which opens the way for a policy of quotas as a matter of routine over an extended period. With a large surplus of a number of agricultural commodities the U.S. Secretary of Agriculture will be under strong pressure to impose quotas on imports of other Canadian products. V

U.S. Wheat Producers Favor Marketing Quotas

Wheat producers in the 36-state commercial wheat area have voted 77.5 per cent in favor of marketing quotas for the 1956 crop in the June referendum. This means growers agree to restrict wheat acreage to 55 million acres in return for price support at 76 per cent of parity or approximately $1.81 per bushel. Had growers rejected the quotas for 1956 the support price would have dropped to 50 per cent of parity or approximately $1.19 per bushel under the present administration's flexible price support system.

Both the government administration and the opposition have claimed a victory as a result of the vote but it is difficult to see how any definite conclusion can be drawn since only 328 thousand wheat farmers out of approximately one million eligible to vote took part in the referendum.

Canadian reaction to the outcome of the referendum has been varied and there has been some uncertainty as to the ultimate effect of the vote on Canadian wheat producers. The general concensus of opinion appears to be that continuation of the U.S. price support level at 76 per cent of parity will aid in maintaining the level of world wheat prices.

Probably of greatest importance was the announcement of U.S. Secretary of Agriculture Ezra T. Benson's five-point program. The plan which aims at improving the quality of U.S. wheat and reducing controls over production and utilization included the following: (1) price support discounts on low-grade wheat, (2) a recommendation to Congress to broaden the non-commercial wheat area, (3) a request that marketing quota penalties be removed from wheat grown only for feed or seed, (4) a request again for legislation to step up Durum wheat production, and (5) efforts to get more farmers to shift from wheat to pasture and hay crops.

If Secretary Benson is successful in obtaining legislative approval of his recommendations wheat production will be encouraged in areas most economically adapted and discouraged in marginal and sub-marginal regions of the country. Most important is his plan to encourage increased production of strong gluten wheats, a more reliable standardization of grades and improvement of the physical condition of wheat as delivered to importing nations. Aimed at increasing the competitive position of U.S. wheat this program may present a challenge to Canadian wheat producers and the Canadian marketing system which can be met only by maintenance of our presently high standards of quality and reliability of grades. V

It's Drier in Western Australia

Continued from page 7

days of blazing Australian sunshine. It had speeded up the growth of clover, which looked fresh and green, but would be burned to a crisp in the usual dry weather, unless a providential, unlooked-for series of showers came along.

(Instead of the series of showers, Western Australia got the heavy storms which resulted in widespread floods throughout Australia, and in headlines in papers around the world.)

There was no wheat growing when we visited Western Australia.

"We seed wheat and oats round about May," said Eardley Shields, "and usually we get the finishing spring rains in August and September. Then we start harvesting about the middle of November, and try to get finished by Christmas. Some years, however, we aren't through until mid-January."

THE Shields crop 4,500 of their 23,000 acres yearly, in a five-year rotation. Four thousand acres is in wheat, the remaining 500 acres in oats. Until the present year, fallowing has been part of the annual rotation, but lea-farming is taking its place. Clover is seeded on the land—it won't grow until each acre has received copious quantities of superphosphate —and the land is left in clover four years out of the five. The final year, the clover is turned under in May and the wheat seed goes directly into the soil.

Oddly enough, the clover is not valued as green manure, nor is any attempt made to introduce humus into the soil. It is a cover crop on which the sheep are pastured, while the leguminous roots release nitrogen into the soil. Similarly, after the wheat crop is taken off, the sheep are placed on the stubble, a dry feed which carries them over the hot summer months, unless some unexpected rains come, which soften and thus destroy the dry feed. Then the farmer must use hay.

Glenvar Station puts up 30-40 tons of hay each year, to carry the sheep or cattle through the dry heat. Twenty-eight head of dual-purpose Shorthorns provide the household with fresh milk, veal and beef, with a small surplus to sell. About 250 hens (called "chooks" almost invariably in Australia and New Zealand) provide eggs for the families on the station, and for the local hospital, as well as some for shipping. Five thousand head of Merino sheep supply meat as needed, and with present wool prices, certainly carry a "golden fleece" on each back.

"WE raise four varieties of wheat on this farm, all rust-resistant strains," said Eardley Shields. "But I'm afraid that's not going to help us much this year. With these early rains, there's not much hope of avoiding rust."

The wheatline in Western Australia has been pushed far inland, in the years since 1924. That year, a state experimental farm was established near Wongan Hills, and tests are still going on, as well as experiments in dry-land farming, which have immensely profited local wheat growers. Australian wheat is of different quality from Canadian; not nearly as hard, nor of as good milling quality.

"We're trying to improve that all the time," said Mr. Bateman, speaking from across the room. "Right now, we have 500 varieties of wheat growing in test plots, and we raise five varieties for seed. We sell this seed direct to farmers, one to three bags apiece, depending on the farm area."

At present, most of Western Australia's wheat is of the Bencubbin variety, although farmers are swinging over to Gluclub, a good producer with better milling qualities. There is a definite effort to improve the milling qualities of high-yielding varieties.

"Not that we want to raise the same kind of wheat as Canada," Mr. Bateman pointed out. "The virtue of Australian wheat is that it mixes well with Canadian wheat in British mills, and is well-suited to producing the famous English biscuits. If we were to produce the same kind of hard wheat as Canada, where would our market be? Our wheat has to go halfway around the world, and it simply couldn't compete with the shorter haul of Canadian wheat."

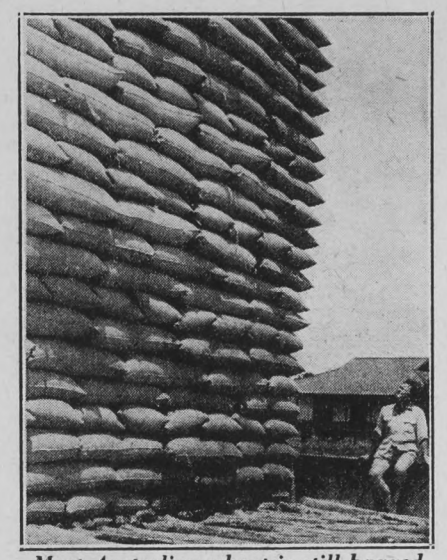
Another noteworthy improvement in wheat-farming is the swing away from bagging, which is still done in most of the Australian wheat-growing regions. Wheat in Western Australia is handled in bulk form. Combined in the fields, it is carried in trucks to the railway sidings, and elevated by continuous belts into "pigpens" of corrugated iron, or into "silos" of the same material. Mr. Shields helped to design these series of curved bins for holding the grain. Or, the grain may

A Canadian, Fred Little, teaches a dual-purpose Shorthorn calf to suck.

be loaded directly into gondolas on the railway, sheeted over for the trip to government elevators. All wheat, both internally and for export, is marketed by the Australian Wheat Board.

IN fixing a price for wheat, the Board takes samples of all shipments, mixes them thoroughly, then studies the result as a "fair average quality" (f.a.q.). On that they base their price, and all the wheat, except a small quantity of premium quality, is sold at a single price.

After World War I, wheat reached nine shillings a bushel—just over $2 at the early value of the shilling. By 1926, it had dropped to about $1.35 a bushel and got down to 35 cents in 1932. In those days, agents used to buy at the railway siding. But in



Most Australian wheat is still bagged and held at railway stations in piles.

World War II, the Australian government took over all wheat purchases and so continues. It also handled the licensing of wheat-growing, which was discontinued in 1948.

Like wheat farmers elsewhere, the Australian insures his crop against hail. Several years ago, hail came just as the crop was ready to harvest. When it got through, there wasn't enough wheat left to bother about. The Shields lost 4,000 acres in that storm.

"Farmers here insure against fire, too," Eardley pointed out. "The country's so dry most of the time, that fire just goes through like—like wildfire, that's all. The willie-willies (dust devils) carry it."

Mr. Bateman could agree with that. "Cigarettes, tractors, sparks from the railway—those are the main sources of fire. We've had fires at the State Farm every year, due to the railway. I hear they're putting diesels on the line before long, and it can't come too soon for us."

WE wondered about the particular problems of wheat-raising here.

"Smut and rust," said Eardley promptly, "just like anywhere else. We have very little insect trouble, but fungi are a pest. We spray for it, of course. We also spray for wild turnip, which is a nuisance here. It gets down into the comb of the harvester, and shoves the grain heads down, so they aren't cut."

Western Australia has a fungus disease called "take-all," which attacks the base of the wheat and literally "takes all." Smut is being done away with by picking the seed, and rust-resistant strains are introduced to avoid that pest.

Rabbits, emus and kangaroos, foxes and the parrot family are the chief faunal pests. Emus are ostrich-like birds, very powerful, and inclined to go through a fence rather than over it. They pick the heads off the grain and trample the stalks.

"Rabbits? I'll say they're a pest," said Eardley. "For some reason, perhaps because we haven't many mosquitoes in this area, the myxomytosis hasn't affected the rabbits here. We still have to try to control them by using cyanide gas in their holes, and then ripping up the warrens with a tractor attachment."

There were rabbits in the country, but not many, before the wheat farmers went to work. "But once we started 'feeding' them, they increased mightily," said Eardley. "And then we brought in the water, and that encouraged them, too. We sometimes put out oats for a few days, then poisoned oats, which kills them off. It gets some of the galahs, too (rose and grey parrots), which is too bad, since they don't do much damage."

Call the vet!
Put back the pails.
Cows weren't meant
To dine on nails.
—Beth Wilcoxson.

Foxes, too, became a menace. The last head-stockman used to go out shooting them at night, with dogs and a night-light. They also tried poisoning them with baited rabbits. They got some foxes all right, but also killed off all their own dogs.

There used to be plenty of kangaroos in the country, which did some damage to the crops, but mostly competed for the water available for sheep. Only a few of these are still in the area, as the land is almost wholly cleared now.

As everywhere in Australia, water is the keynote of any enterprise. The Shields' property provides some water at 40 feet, in a well, and some 20 bores bring up water from deeper sources. This is slightly salty, but not distasteful, and is perfectly suitable for livestock and garden.

"In fact, I like it particularly well for tea," says Mrs. Shields.

I liked it particularly well in the swimming pool, that hot day. With imagination and not an unduly large outlay, the Shields have created an excellent pool on their grounds, a boon in the dry heat. Here, again, the Shields have been in the van with good ideas, which the neighbors find worthy of adoption. V

Britain's Royal Show

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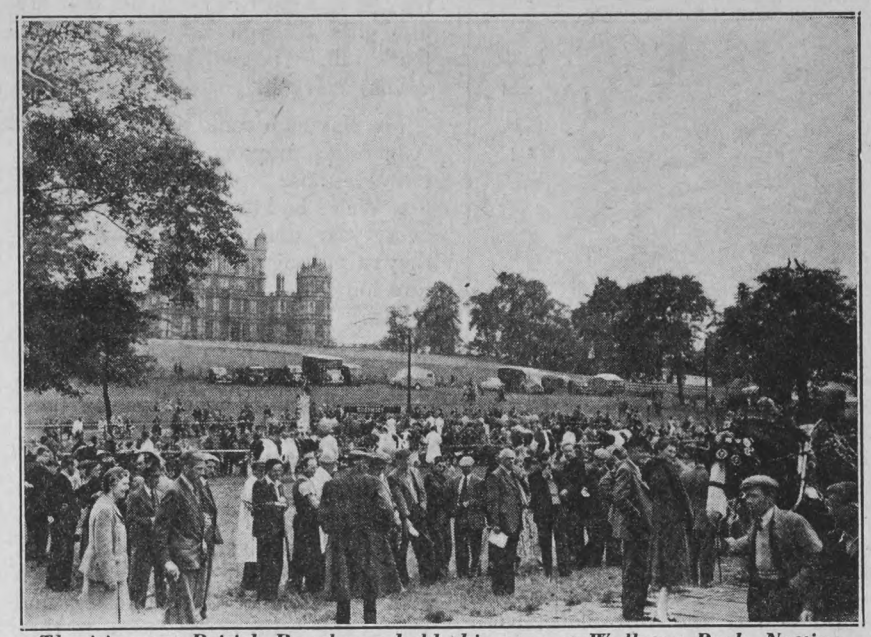
paraded in the main ring. There one saw white-faced Herefords, black glossy-coated Aberdeen-Angus, shaggy Highlands, Devons with coats of that rich, red color one associates with their native county, and all those other breeds that made the "roast beef of Britain" famous throughout the world and whose representatives have gone out to replenish the great beef-producing herds in all parts of the world.

Compared with the solidity and substance of the beef breeds, the dairy cattle were almost trim and delicate in structure; yet the level lines and perfectly formed udders showed that British breeders work with an eye to both conformation and production.

Highlight of the cattle judging came on the third afternoon of the show when the male and female champions of each breed came forward to be judged in the two inter-breed championship contests for beef and dairy animals. This, undoubtedly, was the Hereford's year. From the moment he entered the ring to be judged on the first day, all eyes had been on the eventual male champion, Penatock Crusader, that magnificent bull owned by Mr. Stacey Jones, from Hay-on-Wye, in the very heart of the breed's own country, and which had never been beaten in the show ring. Indeed, many regard this bull as the most outstanding for many a year. Massive and well-proportioned, he carries his bulk of firm flesh in exactly the right places, and Mr. James Allen, the Victoria (Australia) expert who judged this breed, described him as standing out "like a shining star." Penatock Crusader is valued at over £20,000.



The itinerant British Royal was held this year at Wollaton Park, Nottingham. Wollaton Hall in the background lends dignity to the event.

It was perhaps fitting that on what seems likely to be his last appearance in a show ring—for Mr. Jones is now going to use him as his senior herd sire—this great bull should go to the head of the line for the inter-breed championship and lead the Hereford pair to victory in the contest for the coveted Burke Cup.

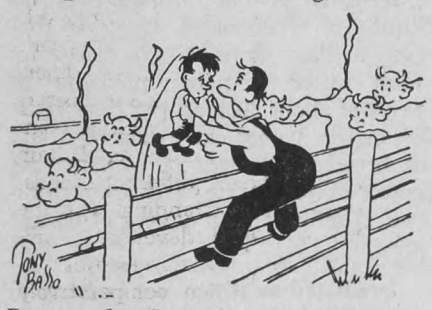
SHEEP, so intimately associated with the start of it all, play perhaps a less conspicuous role today, and to see them one has to wander among the sheep pens, and to understand them, talk to the shepherds—those men so symbolic of English country life. There were some 30 different breeds on view at this year's Royal, and there were many others that were not on view. Many visitors expressed surprise that such a comparatively small country as Britain should have so many different breeds; and even more outstanding was the fact that each had developed sufficient individual characteristics to make its identification comparatively easy.

Small as Britain is, its topographical variations are great, and the whole

essence of successful sheep rearing is to develop a type which does best on the terrain of a particular district. In the south of England, the downlands are clothed with luscious green pastures which make first class grazing, and so encourage the production of mutton. In the North we find heather-covered uplands, bleak and stormy in winter, with poor grazing and climatic conditions encouraging a strong wool growth. And even among the hills, different rocks and soils promote different types of vegetation, so that a type which thrives well in one place may find itself in totally unsuited conditions at a distance of 20 miles or even less away.

The wealth of breeds of sheep in Britain is no fad. It is a necessity and in some measure an indication of the triumph of British breeders in devising animals to thrive well in any climate and on all types of country.

I HAVE referred to that great British pastime of hunting the fox. Britons, as a whole, love horses, and the horse and pony events are always among the most outstanding features of any Royal show. To horse folk, the English Hunter, that substantial mount that will carry the sporting farmer over any kind of country when he rides to hounds, has an ancestry as long and honorable as cattle and sheep. It was interesting to hear that, at the present time, the type of Hunter being bred in Britain is as fine as any seen for over a quarter of a century.



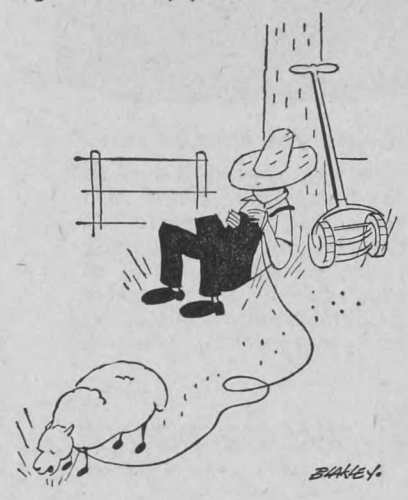
Be sure that Junior's in the clear
Before you drive the livestock near.
—Beth Wilcoxson.

We hear a deal concerning the passing of the heavy horse breeds—those Shires, Clydesdales, Suffolks, and Percherons which have great links with plowing and the land, but every year they come out again, and this time some of the breeds actually had increased entries. It was grand to see them. The Shire is, of course, directly descended from the great horse of Elizabethan England, and although a lot of its tremendous bulk has disappeared, there is still more than a suggestion of power in its movement. The Clydesdale, which, as the name suggests, is of Scottish origin, is of similar type, and there is always something appealing about the fine, clean legs of the chestnut Suffolks.

AND, of course, when one can tear oneself away from the livestock, one walks through the machinery section, along miles and miles of avenues lined with all kinds of mechanical devices. It was in one of these that I met Mr. O. L. Symes, of Windsor, Ontario, who is tractor manager for one of Canada's leading firms of agricultural manufacturers. "What I'd like to know," he said, "is who uses all this machinery? There's so much of it that I just can't imagine who buys it. But I'm more than impressed by the number of mechanical aids—things like feeding and cleaning-out machinery—available for the livestock farmer. That's a side we haven't gone in for on a big scale, but in a country like ours where the labor problem is acute, there seems to be a good market for some of this stuff."

Another thing that impressed Mr. Symes was the lack of unnecessary noise. "It's grand to be able to walk about without having loudspeakers shouting at you every few yards," he remarked.

So, with four successive days of sunshine, great crowds, and a wonderful display of both stock and machinery, the 1955 show of the Royal Agricultural Society of England, at Nottingham, will stand out as one of the most successful exhibitions staged for many years. V



Science And the Farm

Fatherless turkey eggs—diet for everything—the age of rain—legume bacteria—tissue life—how plants feed

Fatherless turkey eggs have been produced at the U.S.D.A.'s huge research station at Beltsville, Maryland. Three parthenogenetic eggs—not fertilized by a male—contained fully developed fatherless embryos, which lived for a period of 26 to 27 days. The station believes that these occurrences may have a bearing on a complaint of hatcherymen, who sometimes find a discouragingly large number of eggs that look fertile but never hatch out. V

A diet for all living organisms has been designed by a scientist at the University of Missouri School of Medicine. It is called Universal Diet No. 1. It would probably not be in much demand in food stores, but has been fed successfully to monkeys, cats, pigs, dogs, rats, mice, rabbits, guinea pigs, opossum, chicks, goldfish, cockroaches, snails and tomato plants, all of which grew satisfactorily. It was also fed to yeasts, mold, fungi, algae and bacteria, for several generations. It was made up of milk protein, corn oil, cornstarch, cellulose, sucrose (sugar), and included also potassium, calcium, sodium, iodide, magnesium, manganese, cobalt, zinc, iron and aluminum, as well as vitamins A, C, D, E, K, and all of the B vitamins. V

Rain is about three weeks old when it falls, according to a University of Chicago chemist. He has made a study of tritium which is triple-weight hydrogen, generated by the action of cosmic waves in the upper atmosphere. When formed, it combines with oxygen to make water, and because it is radioactive, it decays so that half of it disappears in 12.5 years. The age of water then can be determined by measuring its radioactivity. Water from deep wells is often more than 50 years old. V

The eating habits of plants are very complicated. Actually, of course, plants do not eat as animals do, but rather absorb or assimilate certain elements such as nitrogen, phosphorus and potash, which must first be dissolved in water in the soil. A common commercial fertilizer is nitrate of soda. The plant can take the nitrate into its cells, but cannot use the nitrogen until it has been weakened by transforming it into a nitrite. This requires the aid of a special enzyme system produced by the cells for this purpose, which is called nitrate reductase. Before the enzyme system can operate, however, it must have the help of two agencies derived from the vitamins niacin and riboflavin, as well as the metallic element molybdenum. Scientists say that negatively charged particles of the atoms (electrons) are transported from the compound derived from the vitamin niacin (called reduced coenzyme 1) to the compound derived from the vitamin riboflavin and eventually to the metallic element molybdenum. After all this has happened the molybdenum can now reduce the nitrate to the valency, or nitrogen strength of a nitrite. From there on, the plant can use the nitrogen originally contained in the nitrate of soda, and from it can make the very essential proteins, all of which must contain nitrogen as well as carbon, hydrogen and oxygen. All of this detail, of course, is very unimportant to farmers, except that it illustrates briefly what complications there are in the digestive system of a plant. V

There are 1,200 strains of legume bacteria stored by the bacteriologists of the U.S.D.A. at the Beltsville Research Station. These include strains from Africa, Europe, Turkey, Japan and South America. They are kept as long as four years in a nutrient solution, which is protected by a covering of sterilized mineral oil. V

Research at the Massachusets Institute of Technology suggests that even in these days of high prices, an adult can be adequately nourished at a cost of about 60 cents per day. What he, or she, would eat would be a loaf of bread, a quarter of a pound of butter or margarine, a quart of vitamin D milk and six ounces of orange juice. V

Irradiated meat may not be harmful to human beings after all. Up to the present time it has been accepted that meat that has been exposed to the gamma rays which accompany the rays of the atomic bomb is no longer safe to eat. Over a year ago, when a big hydrogen bomb was exploded near Bikini, the irradiated fish that were in a Japanese fishing boat that was about 80 miles away, were all thrown out. Some Japanese scientists actually ate some of the raw meat of the fish and reported no harmful effects. Later some investigations were made on behalf of the Atomic Energy Commission in the United States. For these tests radioactive cobalt-60 was used. Two cows and nine sheep were irradiated and similar numbers of each were used as check groups. The meat from the irradiated cows and sheep was made into dog food and fed to beagles and greyhounds, as well as to albino rats and chicks. The latter were fed meat or organs from the irradiated animals. The two scientists could find no significant difference in the food value of the irradiated and non-irradiated meat. When the experimental animals which had been fed the irradiated meat were killed and their organs examined, none were found to be affected in either the dogs, rats, or chicks. V

Dr. Philip R. White, a U.S. scientist, has a tomato root which has been growing steadily at the rate of one-third of an inch per day, since March, 1933. It achieved its 21st birthday in the spring of 1954. The famous Dr. Alexis Carrel started a culture of heart cells from the embryo of a chick in 1912, and kept it alive for many years until its scientific usefulness had been ended. These illustrations go to prove that living tissue can live almost indefinitely if it can be kept free of infection by bacteria, viruses, fungi and other infectious agents. V

Sea Lions For Mink Food

Continued from page 9

of war, and finally decided to risk a landing. Lowering a stout rowboat, six of them clambered in. Two men took the oars; the others saw to their rifles and ammunition.

When the oarsmen had eased the boat in as close as they dared, the riflemen jumped out into the shallows and began scaling the rocks — to speedily encounter more difficulties than they had bargained for. They found that instead of hunting, they were being hunted. The moment they got ashore huge bull sea lions appeared, seemingly from nowhere, and immediately attacked them, moving faster than the men could run on such difficult terrain.

At close quarters the bellowing of the infuriated animals was so deafening that even though the men shouted to one another they could not distinguish words, and had to resort to gestures. One such signal saved a hunter's life. He whirled around just in time to shoot a monster which had got within ten paces of him unnoticed.

The remaining men were also shooting fast, and bulls collapsed all around them. But when the last of the attackers had been shot, no more came forward, and it became evident that only the animals whose immediate territory had been invaded had rushed to the battle.

Using a steel cable and the motor boat's winch, the dead animals were hauled aboard. Then the hunters set to work skinning and cutting up the great carcasses and stowing the meat away in the ice-filled hold. Returning to Vancouver, the meat was taken to a packing plant, where it was minced and stored. Altogether the hunters had shot 21 sea lions, and discovered to their gratification that, after allowing for all expenses, the prepared food for their fur-bearers had cost them barely six cents per pound, a tremendous saving over what they had hitherto been paying. And they discovered, further, that not only did the mink enjoy the change of diet, but thrived on it.

HUNTING sea lions has its hazards, of course, but a man armed with a magazine rifle that he knows how to use, has little to fear, unless he happens to lose his footing in front of a charging bull. Then a ton of enraged sea lion would speedily be on top of him, smashing his body to a pulp with its tremendous fore-flippers and perhaps even tearing out his throat with its sharp two-inch canine teeth.

Although, for the purpose of this article, I went exhaustively into the matter, only one seemingly well-attested case of a man being killed by a sea lion was discoverable. This happened in 1944, but as the war was then raging, attracted little attention. Also, it has never been decided whether the animal killed the man intentionally, or accidentally. Here are the facts of the incident.

One evening four fishermen sailed their boat into a sheltered cove to anchor for the night. Noting sea lions ashore, one of them volunteered to take their only rifle, land on the beach and endeavor to bag a yearling. Being tired of a steady diet of fish, the others welcomed the suggestion, for those who have eaten the flesh of a young sea lion declare that it compares favorably with veal, while the liver cannot be distinguished from that of calves.

Some time later, as no shots had been heard and the hunter had not returned, two of the fishermen went ashore to investigate. Before long they came upon their companion's remains. His spine and neck had been broken, shattered ribs protruded through his crushed chest, and his face was completely unrecognizable.

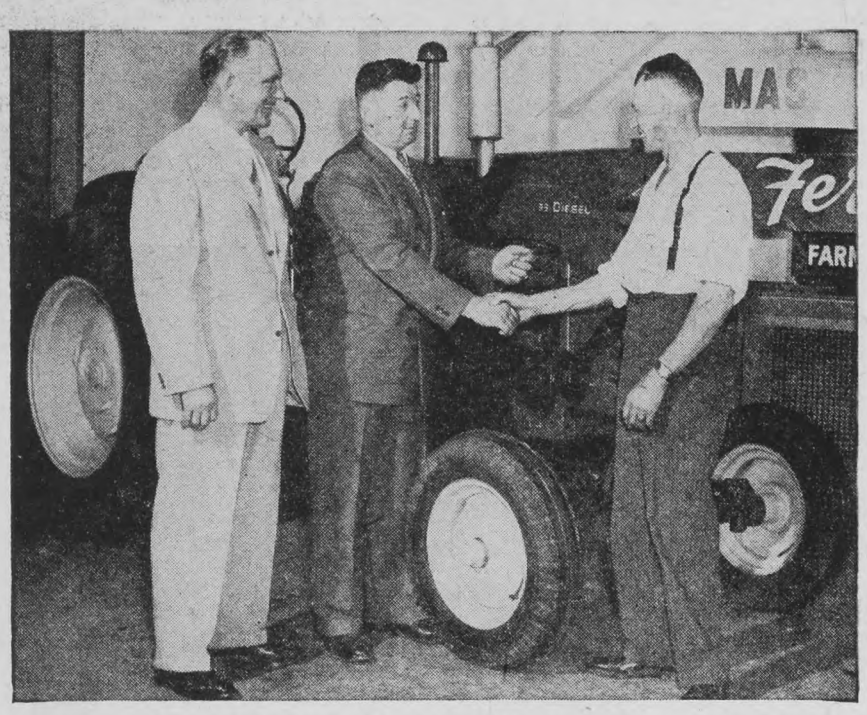
The body lay some 15 feet in front of a bank about eight or ten feet high. Reconstructing the tragedy, the fishermen decided that their partner must have been passing the spot just as a huge bull leaped from bank to beach, alighting fairly on top of the hunter and literally smashing the life out of him. Whether the animal had jumped deliberately, in the course of a furious onslaught, or had not even observed him until too late to check itself, will never be known. But ever since that happening, sea lion hunters have been cautioned against passing too close to high banks.

This summer, and subsequent summers, will likely see many hunters scanning high banks warily, for several hunting parties have planned to procure sea lion meat, not alone for mink food, but for firms who put out canned food for cats and dogs. Some enterprising businessmen even hope to induce the public to acquire a taste for sea lion liver.

June and July—the breeding season —will be the active months. At other periods of the year, the monsters spend most of their time at sea, or if found ashore, promptly disappear into the water on the approach of man. But at mating time they are belligerent and unafraid, which makes it the most profitable time to go hunting sea lions in B.C. V

GILLETT'S LYE CONTEST WINNERS ANNOUNCED!

ALBERTA MAN AWARDED TRACTOR



WILLIAM CHRISTIE of South Edmonton, Alberta, (right) smiles happily as he takes possession of his new Massey-Harris tractor, the first prize in the recent Gillett's Lye Contest. Handing over the tractor key is H. Kwas, Sales Representative of Standard Brands Limited, manufacturers of Gillett's Lye, while H. L. Williamson, Manager of the Massey-Harris-Ferguson's Edmonton branch, witnesses the presentation.

Second Prizes of General Electric Upright Freezers were won by **Mrs. Melania Cornish,** Trenton, Nova Scotia, and **Mrs. George Knipelberg,** Weyburn, Saskatchewan.

Necchi Sewing Machines were won by **Mrs. A. J. McDonald,** Souris W., Prince Edward Island, **Madame T. F. Lindsay,** Isle-Verte, Quebec, **Madame Edmond Landry,** Campbellton, New Brunswick, **Mrs. Charles Carter,** Grosse Isle, Manitoba, **Mrs. G. Scott,** Port Hope, Ontario, **Mrs. Gus Penney,** Corner Brook, Newfoundland, **Madame Pauline Jones,** Lachute, Quebec.

G.E. Portable Radios were awarded to **Rae Armstrong,** Cardale, Manitoba, **A. G. Keen,** Barrie, Ontario, **Mrs. Flora E. Chappel,** Dundas, Ontario, **J. Howard Leech,** Woodstock, New Brunswick, **Madame Edmour Mailloux,** Rang Dix Normandin, Quebec, **Mrs. Geo. Geil,** Lucky Lake, Saskatchewan, **Frank Bergen,** Chilliwack, British Columbia.

A New Farrowing Barn

John Marek and his sons have planned pig production on a profit basis

by **DON BARON**

"KEEP young pigs dry, and warm, and clean," says Mr. John Marek, of Camrose, Alberta, "and the battle is almost won." To prove his confidence in that statement, he has just built a farrowing pen, where his pigs will be just that way. It's not a pig fancier's dream, or a millionaire's hobby-house either. In fact, the only purebreds on the place are the boars to go with the 100 or more sows. It's strictly a commercial venture, and the 156-foot by 36-foot quonset-style barn has pens for 40 commercial sows.

Mr. Marek and his two sons, Roman and Leon, planned this one themselves. After raising pigs for 20 years, Mr. Marek decided they needed better accommodation. The building was planned for utility all the way through. It was made simple and practical and, although it cost $25,000, the Mareks are sure it will pay off in healthier pigs and lower production costs.

Their eyes were on warm, dry quarters for the 2,000 or more pigs a year that will ultimately go through the barn, when they have built the sow herd up to 120.

Thus, the heart of the system could be called the heating plant. It is a self-stoking coal furnace (natural gas is not available) set in the basement of the small storage room built on the side of the barn. Air is taken from outside, heated and driven up the 16-inch pipe to the center of the house. There, the pipe divides into four eight-inch pipes. Sleeping quarters for all the litters are beside the central alley of the barn, and the eight-inch pipes have been laid under the concrete flooring of each, so the feet of the young pigs will stay warm and comfortable. At each end of the barn, the pipes rise to the surface, and pour their heat into the building. A thermostat keeps the temperature at 70 degrees; and ever since the building was finished, in late 1953, pig health has been better than Mr. Marek ever knew it before.

Other factors have been responsible too. Remember, one of Mr. Marek's specifications was cleanliness. The barn meets that need, too. A litter alley runs along each wall of the house, behind the pens: the end of each pen has been built as a gate, and each day the pens are thoroughly scraped out. Another expensive, but labor-saving, feature makes this a practical operation. An automatic, chain-type gutter-cleaner has been built into the barn. The endless chain winds around the building, out one end of it and up a ramp, dropping the litter into the waiting wagon, to be spread in the fields. With this mechanical chore-boy, pens are kept clean with little labor. Cost of the system was $2,500.

OTHERWISE, construction was as economical as possible. The concrete floor and foundation were built with moisture seals. Laminated rafters framed the building and plywood sheathing was nailed and glued on, inside and out. Plenty of windows were provided, both for the hog barn itself, and the loft above, which is used for straw storage. The pens themselves were framed with planks, but one-inch boards proved sturdy enough for the two feet of space needed by the buried pipes for the young pigs.

With healthy quarters assured, the next step was a sound feeding program. The Mareks, who shipped 730 pigs last year and got grade A's on half of them, have given careful attention to this program. The sows run out on pasture in winter and summer, until two weeks before farrowing. During this two weeks they get a ration of one-half oats, one-quarter barley, and one-quarter wheat, with buttermilk added, or additional protein. A little calcium and salt are also added, as well as one part of sow concentrate to ten parts of the ration.

One day before farrowing all feed is stopped; and when the litter has arrived, the sows get all the buttermilk they can take for a period of ten days. By then they will have been brought back on full feed of the pre-farrowing ration. Some hull-less oats are now used in the ration, because the young

[Guide photos

John Marek notches the ear of a piglet in the large, new farrowing barn for his 100 sows. His son (right) feeds some youngsters nearby.

pigs will soon be eating from the trough with the sow.

Meanwhile, any black teeth are removed from the young pigs if they bother the sow, and iron paste is given at three, seven and 14 days of age.

Sods put into the pen every second day assure no lack of iron. By the time they are ten days old, the piglets will be eating commercial crumbles, from their own creep feeder. In addition, they will get buttermilk, which has been fortified with aureomycin and aurofac D, antibiotics that have proved valuable. In fact, all of the buttermilk that the Mareks haul from Camrose has antibiotics added to it.

The pigs are weaned at six or seven weeks of age, and are put in growing pens, where they continue to get buttermilk up to a weight of 100 pounds. They also get a ration of half wheat and a quarter each of hull-less oats and barley.

By this time they are ready for the finishing pens, which have been built into an old barn. This barn was remodelled for labor efficiency, too. A giant self-feeder, built from the floor above, divides it into two parts. The pigs eat as they like and drink from water fountains. The pens are cleaned daily by a blade on a tractor. V

Seedlings Inside Fruits

by HENRIETTA K. BUTLER

LAST fall I cut open a tomato which had been ripened in our dining-room window. To my surprise, the tomato was full of well germinated seeds — green cotyledons and roots. We decided that the method of ripening and the atmosphere of the room must have brought about this strange occurrence. At that time, we had never heard of such a thing happening anywhere else.

Lately, again, I found that a pink grapefruit, which I was preparing for breakfast had also germinated many of its seeds in this rather unnatural way. Now, to add to these experiences, we have come across similar observations by amateur gardeners in England. One gentleman, on cutting a lemon discovered a seedling well developed with green cotyledons and root, and another, whose wife cut open a vegetable marrow in the late winter, found seeds well sprouted, though without the chlorophyl. She went so far as to save the premature offspring, put them in a seed bed and complete the cycle by raising many healthy plants.

A professional gardener answers that there is probably not much known about this unusual occurrence of seed germination, but it certainly would be something to do with ripening and weather conditions. He suggests, in the case of the green seedlings, the skin must have been semi-transparent, thus admitting rays of light which stimulated the growth of the green coloring substance.

(Note: Authorities at the University of Manitoba say that fruits and seeds contain substances called "inhibitors," which prevent or hold back germination; and that the examples in the above article probably represent instances where Nature's foot slipped, or where perhaps man's effort to improve plants has led to some abnormality.—ed.) V

Royal Jelly– Food for Queens

Does the busy honey bee produce a substance which holds a key to the fountain of youth?

by **A. J. THORSTEINSON**

BEAUTY, fertility, rank and long life—might we all have these by adding royal jelly to our diet? This startling possibility has aroused great interest in France and Switzerland and is at present stimulating research in Canada and the United States. Cosmetic creams medicated with royal jelly are already on the American market. The large Wulfrath and Specht apiary in Mexico is producing royal jelly in quantity and promoting it as a health food and glandular restorative alleged to prolong vigor and induce a sense of well-being. Myriads of Mexicans have signed testimonials crediting cures from a long list of ailments to the royal jelly treatment. The Bishop of Cuernavaca, the story goes, had to change his spectacles three times in 90 days to the confusion of his optometrist after he started taking royal jelly because his sight improved so rapidly. A Mexican editor ascribes the mending of his broken marriage to eating royal jelly. Enthusiasts in France have attributed the immortality of the ancient heathen gods to royal jelly but have not produced any signed testimonials.

Scientifically, the medical virtues of royal jelly have not yet been confirmed nor denied, but its possibilities were interesting enough to attract the attention of the great Dr. Frederick A. Banting. Two members of his staff, G. F. Townsend and C. C. Lucas performed a chemical analysis 15 years ago. Later, other workers including the Canadian, H. L. House, analyzed royal jelly for amino acids, the basic building blocks of body growth and repair. Other investigators found that royal jelly is a rich source of the B vitamins, especially pantothenic acid which, it is claimed, confers long life to the queen bee. When royal jelly is fed to female rats, activity is stimulated in the ovaries, demonstrating a sex hormone effect. In addition to these virtues, royal jelly has powerful antiseptic properties, necessary if it is not to spoil in the humid warmth of the bee hive.

What is royal jelly? It is a thick, white liquid with a pungent, cheesy taste, secreted by the brood food gland in the head of the honey bee. The white secretion has been called "bee milk" although, of course, bees do not suckle their young but merely pour the royal jelly into the waxen cells of the brood comb that cradle the grub-like baby bees. All honey bee larvae eat pure royal jelly for the first two days of their lives but, thereafter, only the female grubs destined to become queens are served this special food. The others must make do with more humble fare—"bee bread"—a mixture of honey and pollen. The honey provides a rich source of energy for growth and the pollen supplies proteins and vitamins.

Even this plain food is strictly rationed to the adolescent worker caste and their space is so limited by the waxen walls of their cells that they can never realize their full growth potential. The adult worker bee produced by this upbringing is a trim, efficient maid of all work except motherhood. Her life span is from six weeks to six months. Her reward for continual toil is an early death.

Contrast the career of the queen bee. She begins life as a fertilized egg no different from those that produce workers but her brood cell is a spacious waxen chamber. Throughout her larval existence of six days, she floats in an abundant broth of royal jelly. The quantity and quality of this nourishing bath is such that she needs five days less to mature than her ill-favored sisters and then she is larger and fairer than they. Added to beauty, she is endowed with the tremendous maternal capacity to produce as much as her own weight in eggs day after day during the peak of the growing season. Her diet of royal jelly contains a hormone that keeps her ovaries working at this high productive level.

The queen has a retinue of maids of honor, worker bees that groom and guard her every moment and feed her with royal jelly. As befits a queen, she is excused from all household chores. Finally, she has a life expectancy of two to six years.

Alas, the ray of human hopes reflected from the glistening white surface of royal jelly casts its shadows. The leading authorities are not all agreed that the queen bee owes her fair form, fertility and privileged position merely to the unique qualities of royal jelly. Professor Haydak of the University of Minnesota reminds us of the large quantity of royal jelly needed to rear a queen bee. The busy worker bee can afford to devote only a few days of her crowded life to lactation and most of her career is dedicated to harvesting honey and pollen to feed the legion of worker brood that is the backbone of apian society. While a colony of bees may store up several hundred pounds of honey and quantities of pollen, it produces no more than a few ounces of royal jelly. If it takes an ounce or more to rear a queen bee, how much royal jelly would be needed to nourish even a midget not to mention a man or woman of normal size. It would be like trying to get a tan by moonlight.

There are several good protections against temptation, but the surest is cowardice.—Mark Twain.

And when all this is said, is the queen of the bees really to be so envied? Her regal status is a myth born in the fancy of the early observers who wrongly guessed even her sex and called her a king. Her throng of daughters are not subjects but ruthless rulers of the hive. They, not the queen, regulate the issue of swarms and all other matters and in turn are commanded by some intangible force which Maeterlinck calls "the spirit of the hive" that demands worship in the form of sacrifice and toil.

Should the queen fail or falter in her task of egg production, the workers callously rear a new queen if they can to replace her and, though they may tolerate her presence thereafter, she seldom survives for long, succumbing perhaps to neglect. Their servile loyalty to the queen is a sham. They know no law but the primeval drive for group survival.

Yet, notwithstanding these doubts, the mysterious mixture called royal jelly will, and rightly, continue to engage the scrutiny of research. No crystal ball can divine the impact of new knowledge until it is won and the insatiable curiosity of man will drive him to seek it, goaded perhaps in part by some sophistication of the ancient quest for the fountain of eternal youth.

(Ed. Note: A. J. Thorsteinson is acting head of the Department of Entomology at the University of Manitoba.) V

Sheep on Sandy Land

EAST of Wainwright, Alberta, in the Heath district, Morton Herbert operates three sections of rolling, sandy land. It is too light for continuous cropping, as more than one farmer has discovered to his sorrow.

This land will, however, grow grass, and Mr. Herbert and his three sons are busy getting it down to grass as fast as they can get it broken. They need both grass and hay to keep the flock of 300 range ewes and a small herd of beef cattle. The native grasses that have not yet been plowed down are not productive enough for the expanding livestock population of the farm, and the Herberts have therefore turned to tame hay.

Mr. Herbert has only been on this farm ten years, but they have now 400 seeded acres. Alfalfa, brome and crested wheatgrass have proved so far to be the best, and have never failed to catch at seeding time. This year the Herberts are seeding creeping red fescue, as well, to find out whether it will mean earlier spring growth.

Grass is always seeded at the rate of five pounds per acre, with a nurse crop of oats or barley. The Herberts remember buying hay in previous years to finish out the winter, but they believe that they now have this possibility nearly eliminated. Last year they put up 10,000 bales of hay, and used only 7,000 bales. They therefore have a carryover, should a dry year come.

From 100 to 150 acres are cropped each year, but the amount depends on how much new land is broken. The field they first seeded to tame grass will be broken up again this summer. It has been down eight years, but hundreds of moles have burrowed through the field and seriously lowered its productivity.

As the grass program began to pay off, the need for more livestock became more pressing. Father and sons are now attempting to keep all of their ewe lambs, but with tame forage growing so well they find it difficult to keep up to the feed supply. V

The Countrywoman

Memories of My Mother

by IRIS ALLAN

We are in a recollective mood these days when two of our family-provinces are busy celebrating Golden Jubilee birthdays. Each family has its own private store of memories tied in, not just with material progress, but with gallant men and women who endured hardship with "a heart of grace." The contribution presented here by an Alberta writer serves to bring to the minds of many, other similar stories, perhaps never to be written

Affection lights a brighter flame
Than ever blazed by art.
—WILLIAM COWPER.

I SHALL always think of my mother as indomitable. In spite of an unhappy marriage, she brought up her four children in the way she thought we should go; to fear God and to be true to ourselves.

With a tremendous fund of energy, she seemed to run our large home with one hand, attend numerous clubs, church groups, do social welfare work, and went about "getting out the vote" with the other.

She was an ardent feminist, and nothing horrified her more than the apathy of many women in the '20's who told her their husbands did the voting, or that they could not get out because of the children. Mother could not abide such sloth of mind or body. She would give them a lecture on the trials of the women who had fought for women's rights. Many a time she took it upon herself to sit with their children while she urged the unwilling women to the polls.

Of Scottish birth, she retained her accent all her life, and was very proud of her lineage. She frequently embarrassed us children by telling people that her forefathers were hung for sheep stealing. We thought that such family skeletons were far better left in the closet.

We were introduced to Robert Burns' poetry at an early age, and to this day I can reel off line after line of "A Cotter's Saturday Night" or some of the more hair-raising parts of "Tam O' Shanter." When she thought one of us was getting above ourselves, she would quote her favorite lines: *"Oh wad some power the giftie gie us to see oursels as others see us! It wad frae monie a blunder free us, an' foolish notion."* This never failed to take us down a peg.

On cold winter nights her rich Scottish burr would ring out with this wonderful poetry. I was well past childhood before I realized that Burns hadn't been the only man in the world to write poetry. As far as mother was concerned, he was.

SHE had none of her "ain folk" in this country, but we children never missed not having aunts, uncles, and cousins. For in spite of the dissension in our home it was an "open house" with people in and out at any hour of the day or night. Mother loved them all and was intensely interested in their problems. These were not only neighbors and friends, but anyone who might knock on the door, be it a tramp or the town constable. The kettle was always on the boil and tea would be served, accompanied by some of her Scotch scones which she made expertly, potato pancakes, or bread fresh from the oven.

Our home was in a railroad town with its polygot peoples, so that we had an unusually wide assortment of acquaintances, for race, creed or color made no difference to my mother, who was a staunch Presbyterian all her life. This diversity of friends made an interesting childhood for us, as one day we might have Jewish friends in, the next it would be a Polish family. At Christmas time the Italians, employed by my father, would inevitably drop by, bearing gifts of exotic fruits and wines in beautiful baskets. What happy occasions these were! These kindly people would stand diffidently at the door, smiling, bowing, and doffing their caps, till my mother would smilingly put them at ease.

I was the youngest in the family and the delicate one, which meant that of necessity I received a large share of her attention. This was a wonderful thing for me, but what a trial I must have been for her, as the others were robust and healthy. Never, by word or deed, did she ever let me think I was a nuisance, but gave me the kindest care and love. She would make cup after cup of beef tea "to give you strength," and coax my flagging appetite with delicacies I know were beyond her slender purse.

She had one little vanity and that was her tiny feet. I never knew her to wear anything else but high heels, even at her housework, so that she would tap tap about the house with her quick and boundless energy. How welcome those tapping heels were to me as she made trip after trip upstairs to tend me in my illnesses. She brought cheer into the room and a smile was always on her face, even though she had spent wakeful hours with me the night before.

Several times the doctor gave me up, and I know now that she pulled me from the dark shadows by the sheer force of her indomitable will.

At the age of eight I contracted rheumatic fever, which meant many months in bed. Mother brought me enchanting books to read, to while away the endless hours of convalescence. One day, in despair, I refused books, food, or solace of any kind. But with her wisdom, Mother knew that sympathy was not the antidote this time. Instead she placed a tiny book of quotations by my bedside and quietly left the room. I wonder if it was just chance that it was opened at a page that read, *"If you are not strong in your adversity, you are weak indeed"*?

She had a wonderful sense of humor, and a highly infectious laugh. Small tragedies of childhood she could adroitly turn to comedies, till we found ourselves laughing, even through our tears.

Her own life was full of tragedy: a husband who was all wrong for her; the letters, edged in black, that came from over the sea, and a sickly child. But her tears for her beloved brothers and sisters were shed in private. Her cure was work: a batch of baking for a needy family — a pair of bootees knitted by her nimble fingers for a neighbor's new baby, a word of cheer for others in their sorrow.

At one time she suffered a severe accident to her feet, burning them cruelly. The doctor shook his head; she was to stay in bed for many months. When he left she looked at our long faces, and gave us her usual smile, "You're not believing yon man? Why, he's daft." Sure enough! In a matter of weeks she was tap tapping about the house in her high heels.

The only people Mother had no patience with were those who did not live life to the full. She herself did not sit and wait for life to come to her, but met it with a rush. No matter what other troubles we had, no one in our home ever suffered from boredom, there were far too many wonderful things to do and see.

ON Sunday afternoons before we owned a car, there would be long walks, with the inevitable dog at Mother's heels. But we did not go just for the sake of walking. We were told to stop and observe the magic of a flower opening, the formation of a cloud. "There's none so blind as those who won't see," was a favorite expression of hers, or "Keep your eyes open and your mouth shut."

What if it rained? Then would be the time to make an occasion of a taffy pull, a guessing game, cards, or a story or poem told by a warm fire.

She taught us all the Highland Fling, and the Sailor's Hornpipe, amazingly accurately I found later, for one who had never studied dancing. She saw that we all took music lessons, and there was no nonsense about practicing. We were made to realize what a privilege we were receiving, which indeed we were, in a home where there was not too much money. Somehow there were skates for the four of us, birthday cakes and candles, and always a continual stream of people. She was such fun to be with that she attracted people like honey attracts a bee.

As the family grew up and married, she retained her independence, and refused to live with any of us, even though she was now alone, released at last from an intolerable marriage through divorce. Occasionally when she felt the need to see us, she would make a short visit.

HAPPILY she would take a turn at the stove and make delicious scones and potato pancakes. In vain we would coax for the recipe, for she was of the "little of this, little of that" school, tasting as she went along. Then, before we could tire, she would go off to her own little apartment.

She lived alone till she fell seriously ill and was taken to the hospital. I now lived in another part of Canada, but when my sister's message arrived, I went to her immediately.

As I entered the hospital room I was horrified to discover that she was in a four-bed public ward. As soon as we were out of her hearing, I said to my sister, "Good Heavens! Let's get her out of that ward and into a private room." This was not from any feeling of snobbishness, for I would not have been my mother's daughter if it had, but I had a conviction she was going to die, and I wanted her to be as comfortable as possible.

My sister, far wiser than I, looked at me pityingly, "Mother? In a private room with no one around?" Of course she was right. Mother would have hated to be alone, she who had lived with and for people all her life.

How thankful we were that she was able to be up and about till the eve of the operation we knew was to be so critical. We bought her a pretty and comfortable pair of bedroom slippers, but she dismissed them in short order, "Bring me my high heels. I canna abide those flip flopping things."

And she donned those high heels and tapped about that ward, making friends with everyone, and listening to their troubles. To some she gave words of encouragement, others joined in that infectious laugh of hers as she told them some comical anecdote of which she had a great store. Again she was using her antidote for her own troubles — helping others over theirs.

One of the finest tributes to my mother was when my sister and I took the nurse aside to ask what she thought of Mother's condition, for the doctor had been evasive after the operation.

To our amazement the nurse began to cry. This woman, who had surely seen many tragedies, had in the short time she had known my mother, come to love her. Gently, through the tears she said, "You wouldn't want your mother to suffer. Nor would I." Then she turned and left us.

The last words my mother said to me, even as she tried to smile, were, "I'm weary." In truth she had reason to be, for she had run a good race. Those of us who knew her, years later still feel the impact of her indomitable spirit.

Always make sure that your mail is properly addressed, and that you have signed your name and address to your letter or subscription order. An omission will cause delay in filling your order.

Designs for August

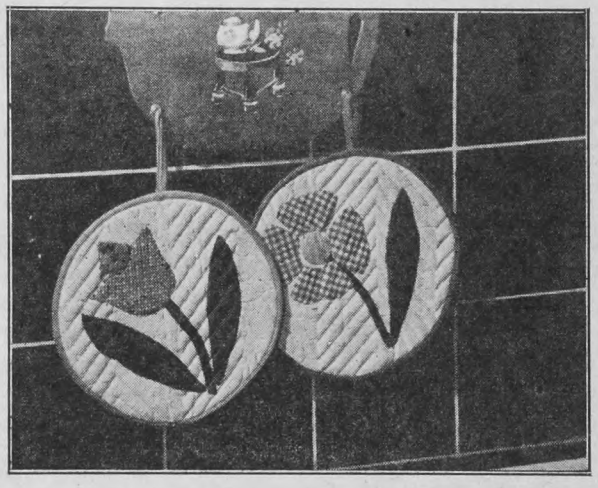
Sewing and crochet ideas for spare-moment working

by ANNA LOREE

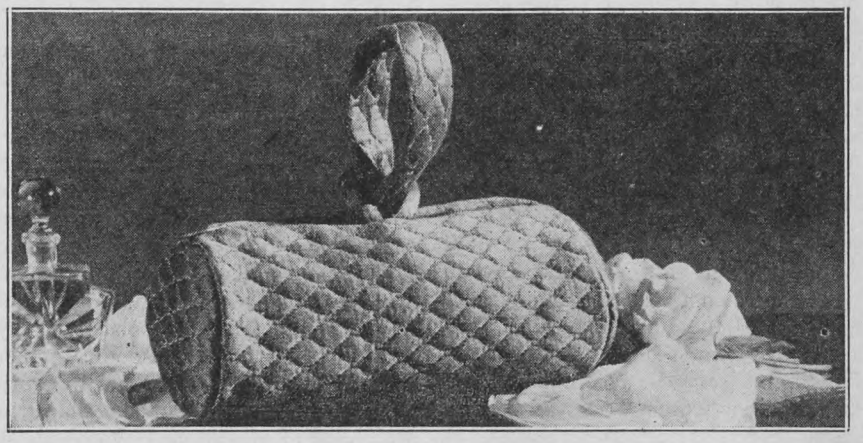
Design No. CS-339

A set of these crocheted glass jackets absorb the moisture condensation from the glass when serving cold summer drinks. They are attractive, quick and easy to make, and they protect tables and other furniture from water rings. Six different designs are given in one leaflet—which also includes a pattern for a half apron of crocheted insert and floral ribbon. Use left-over brightly colored cronita or pearl cotton for the jackets. You will need No. 7 and No. 4 steel crochet hooks. The apron requires 4 balls size 30 crochet cotton, No. 10 steel hook and 7 yards 1½-inch floral ribbon. Design No. CS-339. Price 10 cents.

Design No. PS-2562



Gay tones in prints and checks add a novel touch to these easily made potholders. Use a quilted baby pad for the holders. It is thick, ready for use and easy to handle in the kitchen. Appliques of modernized floral designs are applied by machine or by hand and the holders are bound with bias tape to contrast. Each holder is 6½ inches in diameter. The designs include a tulip, a daisy and two bluebells on a stem. Design No. PS-2562. Price 10 cents.



Design No. SE-465

Slip this handbag over your arm. It is attractive in a dark or pastel color, with a coat, suit or dress, for day or evening wear. Make it of a remnant of drapery, upholstery or quilted fabric. It will accent your prettiest costume. Its finished size about 13 by 4 inches, you will need ½ yard 54-inch for bag, ½ yard lining, interlining and a nine-inch zipper. Design No. SE-465. Price 10 cents.

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Legal Points on Family Finance

by MARJORIE K. STILES

In daily practice a lawyer sees the very best in human nature, also the very worst. It is protection against the latter that the average person needs. Reporting interesting highlights of a talk to Alberta farm women assembled in convention study group meeting, given by J. E. Brownlee, Q.C., on various phases of family finance

Review of new booklet "Some Canadian and Manitoba Laws of Interest to Women," now available to women's organizations in the province

WITH the complexity of modern living it has become increasingly apparent that women need to know more about the legal aspects of family financing, what the laws are, and why they were made so. The Farm Women's Union of Alberta have for some years prepared a seminar at their annual convention along these lines. Mr. J. E. Brownlee, Q.C., President of United Grain Growers Limited, and his son Allan Brownlee, a practicing lawyer in Edmonton, have given the talks on this program.

This year the subjects dealt with included: (1) Alberta laws affecting women; (2) family financing; (3) making and probating a will. The talks were given by Mr. J. E. Brownlee and were followed by a lengthy discussion period during which the delegates covered many legal problems which farm women are being faced with today. The questions asked included: In the event of a car accident in which both parents are killed, what legal arrangements should have been made to protect children? Can a woman take out an insurance policy which will pay succession duties on her husband's estate, so she will not have to sell the farm in order to provide cash for this? If a man makes a will, naming his children, then dies and another child is born posthumously, does that child share in the estate? The talks and questions were recorded and it is planned to have them mimeographed so that a wider reader audience may be reached.

"In his daily work a lawyer sees the very best in human nature and also the very worst, and it is protection against the latter contingency which the average person needs," Mr. Brownlee declared.

IN reviewing the highlights of legal rights won by Alberta women, he first mentioned winning the franchise in provincial elections which was first exercised in 1916. The second great stride in legal emancipation was the Dower Act which provides the woman with a life interest in the homestead. This has been amended to provide protection for either spouse and also includes a life interest in personal property and machinery which cannot be willed away. Another milestone was passed in 1947, when the widow was granted the privilege of petitioning the court for maintenance if adequate provision had not been made for her or her children. Some time later the Mother's Allowance Act was amended to include a wife who has been deserted for three years and a common law wife of five years' standing who had children registered in the name of the man.

In the matter of family financing, protection for the farm and home are of prime necessity. The best way for young people starting out to do this is with a life insurance policy which will provide ready cash in case of death. Too many farms sold have had to be sold because the widow lacked the ready cash to settle immediate estate obligations.

"On a farm, where one lacks the protection of a modern fire department," Mr. Brownlee said, "anyone not carrying fire insurance on their home is guilty of extreme negligence.

"When one is young, and his earning capacity at its peak, it is difficult to visualize the limitations of old age, but that is the very time to give some attention to building an annuity for old age. You will be surprised how just a little put by regularly adds up in thirty years.

"In these times," he continued, "if there is any one way of wrecking an estate it is through a fatal car accident." In his opinion all car owners should be covered with public liability insurance, of at least $10,000 for one person or $15,000 for two. In a large company where a fleet of 60 cars are in operation they find it reduces the cost of car insurance if a "deductable" policy is carried, in which the owner pays for small accidents amounting to $50 or less.

Where the family farm consists of one quarter or half section, Mr. Brownlee recommends the deed be registered in the names of both husband and wife as "Joint Tenants." Then on the death of either party, the survivor submits proof to the Land Titles office, that succession duties, if any, have been paid, and the deed will be reissued in the name of the survivor. With large landholdings the joint ownership is of no great benefit.

"Everyone should make a will," Mr. Brownlee insists. It is simply a matter of good economics, because when a person dies intestate, a bond must be put up for twice the value of the estate, and these bonds are becoming increasingly difficult to arrange. Also, the government must appoint an administrator for the estate, or if there are minor children an Official Guardian becomes responsible for their share of the estate. "It is much better to have made a will, naming a person, mutually acceptable, as the executor."

A holograph will is legal, providing it is made entirely in the handwriting of the party concerned. One made on a printed will form is not a legal holograph will.

In the case of a young couple, Mr. Brownlee recommends both husband and wife have a lawyer draw up similar properly witnessed wills, appointing their spouse sole beneficiary and administrator. He suggests reviewing the terms of a will about every five years as family circumstances change. Succession duties are payable only on estates in excess of $50,000. Mr. Brownlee finds farmers do not usually fall into this group. However, an estate valued at over $50,000 is taxable on the entire amount.

IN order to save time and consequently reduce fees of the lawyer who handles the probating of the will, Mr. Brownlee recommends the following information be written out for the lawyer (it is also a good idea to keep carbon copies of all such information): (1) Full name, age, date of death, and residences during the previous six years. (2) Full names and ages of all beneficiaries. (3) Value of household goods based on second-hand price. (4) Total amount of bank account on date of death. (5) Description and location, section, township, etc., of all land owned. (6) Farm improvements, including buildings and fences. (7) Number of livestock, classified; as cows, calves, etc. (8) Farm machinery, present value and date purchased. (Here a well-kept income tax inventory would be valuable.) (9) Car, its make and year. (10) Bonds and stock listed. (11) Equities, such as memberships in cooperatives. (12) All debts should be specifically listed including bank loans, mortgages, funeral expenses, doctor and hospital bills.

Women all too often are content to leave the family finances to the man of the house, with the exception perhaps of the family allowance and the egg cheques. One day a farm woman may find herself a widow, with the responsibility of the entire estate, minus the help and advice of the "breadwinner."

Laws of Interest to Women

by AMY J. ROE

THE desire of women to know what the laws are, how they affect them and how possibly those laws may be improved is highly commendable. For many years there have been alert individual women and organization groups which have taken an active, positive attitude toward legislation and legislators in the province of Manitoba. Some creditable "firsts" have been chalked up: Manitoba was the first province in Canada to enact legislation granting equal franchise rights to women; the first to establish a separate ministry of health and public welfare; a leader in consolidating legislation concerning the welfare of children under a comprehensive act.

The announcement of the publication of a booklet "Some Canadian and Manitoba Laws of Interest to Women" has been welcomed by individual women and women's organizations interested in legal studies. The booklet, authorized by the Attorney-General of the Government of Manitoba, will shortly be available through the office of the Queen's Printer, at no charge.

The booklet suggests some subjects for study and is designed to answer questions which women are asking in public meetings and in letters to public officials. In its "foreword," Hon. Michael N. Hryhorczuk recognized the interest properly taken by women in such subjects and the need for general information. The booklet will provide a handy "guide," but as he points out: "It is not in any sense intended to be a synopsis of the laws in force in Manitoba, a legal textbook, nor a substitute for several volumes of the statute law of Canada and the province." At the close the minister expresses the hope "that it will assist the women of Manitoba in their proper desire to better fit themselves and their families for the responsibilities of self-government."

The booklet was prepared under the supervision of Miss Mildred B. McMurray, a lawyer of the Department of Health and Public Welfare with the assistance of Mr. W. Scott Wright of the Department of the Attorney-General. It is written in a simple, direct style with the avoidance of much strictly technical legal phraseology, which makes it easily understandable to the average reader.

A brief history of the principles and origin of our laws, notes: "The laws of Manitoba are the laws of England, as they stood at midnight on July 15, 1870, except in so far as such laws have been amended or added to by the Parliament of Canada or the Legislature of the province."

There is, too, an explanation of how the fields of responsibility were apportioned as between the federal and

(*Please turn to page* 42)

Into the Lunch Box

Quick-frozen packaged sandwiches and desserts minimize the work of making school lunches

SCHOOL lunch days are here again. So get out the lunch box and dust it off well. It will be in use five days a week for the next ten months.

To many homemakers making lunches is a tedious chore. Plenty of variations will make the task — and the eating — more enjoyable. And sandwiches and desserts made in large quantities and quick frozen will cut lunch-making time to a minimum.

Lunch preparations become a daily task as another school year begins.

Perhaps, to start, you will only freeze lunches for extra-busy days during the canning or harvest season, or for days when you will not be at home to make the lunches. You will soon find lunch making becomes part of your weekly, rather than daily, schedule.

For the best in quality and economical use of freezer space plan to leave sandwiches in the freezer not longer than two or three weeks. Properly packaged they will keep up to a month — after which time, although perfectly safe to use, the flavor will probably suffer. Cakes and pastries will keep well for several months.

Make a quantity of each of several kinds of sandwiches. Place them in the freezer so that a different variety is at hand each day. They can be popped right into the lunch box from the freezer. By noon they will have thawed but will be cool and just as fresh and tasty as when they were first made.

In general, prepare the sandwiches or dessert as you would if they were to be eaten that same day. Sandwich fillings such as ground meats, cheese, fish or poultry are excellent. Use cooked salad dressing rather than mayonnaise for flavoring and be careful not to use too much. It may separate on freezing.

Sandwiches for freezing should never be made of fresh salad vegetables. They don't freeze well. If you make hard-cooked egg sandwiches use only the yolks as the whites tend to become tough and porous upon freezing. It may be a good idea to separate the eggs before cooking. Freeze the whites "as is" for making meringues or baking at a later date; then poach the yolks until hard cooked. Season and use, alone or in combination with other foods, as the sandwich filling.

Fruit cakes are particularly successful for freezing. Plain cake, and all its variations, freeze satisfactorily and frozen angel and sponge cakes keep well for a month or so. Frostings and fillings may be applied to the cake before or after freezing. Icing-sugar and fudge-type frostings freeze particularly well.

As for pies and tarts, freeze the baked shells, if you wish. Cooked apple and pumpkin pies will freeze well, while other fruit pies and mince pie are best when frozen unbaked. Do not cut slits in the top crusts of the unbaked pies before freezing.

Package the sandwiches, cakes and tarts intended for school lunches in individual packages—enough for one lunch for one person. Use moisture-vapor proof wrappings that are sold specially for food freezing. Wrap the packages carefully, excluding all the air possible. The drug-store wrap is excellent for the packages of sandwiches.

Aluminum foil is perhaps the best of all wrappings although it is slightly more expensive than others. Use it for pies, cakes and tarts. It or one of the other moisture-vapor proof wrappings will keep the sandwiches fresh for several weeks. Freeze the prepared food as soon as it is packaged at five degrees below zero. Store at zero or lower.

Allow the foods to thaw in their own wrappings on the way to school. They will be fresh, moist and still cool come lunch time. Cakes, in particular, must be thawed before unwrapping to prevent moisture forming on top.

With sandwiches and desserts taken care of beforehand, the homemaker need only to think of the extras to go into the lunch box. As one of the three daily meals the child gets, the well-balanced school lunch needs milk, raw fruit or vegetable and, in all but the really warm weather, something hot, as well as sandwiches and, perhaps, dessert.

Cooked Salad Dressing
(for use in foods to be frozen)

¼ *c. sugar*	⅛ *tsp. pepper*
2 *tsp. flour*	1½ *tsp. butter*
¾ *tsp. salt*	2 *eggs*
¾ *tsp. dry mustard*	¾ *c. milk*
Few grains cayenne	6 *T. vinegar*

Mix sugar, flour and seasonings. Melt butter; beat eggs slightly. Stir butter and eggs into dry ingredients gradually. Slowly blend in milk, then vinegar. Cook in double boiler until mixture thickens, stirring occasionally.

For Each Member of the Family . . .

The Country Guide's editorial staff provides inspiring and practical suggestions to help you succeed as well as for better living.

Milk Desserts

New ideas and variations give added interest to all-time favorites

FLAVORFUL, refreshing, simple-to-make milk puddings are a delightful way to end a hearty meal. Dressed up with fresh or canned fruits, new flavorings or toppings, such as the walnut-brittle topping on the bread pudding below, they will be even more popular with the entire family.

Nutritious, as well as delicious, milk puddings supply some of the milk, eggs and energy-giving foods required by the body each day. Milk, the nearest to the perfect food, contains among other nutrients, calcium, phosphorus, Vitamin B2 and protein. Eggs, too, supply body-building protein, Vitamin A and iron. Is it any wonder Canada's Food Rules state children need at least a pint of milk each day, adults a half pint and all need at least three eggs a week?

Lemon Rice Cream

½ *c. rice*
2 *c. milk*
1 *c. boiling water*
1 *egg, separated*
⅓ *c. sugar*
½ *tsp. salt*
Juice and rind of 1 *lemon*

Wash rice. Cook with milk and water over boiling water until tender (50 minutes). Mix egg yolk, sugar, salt, lemon juice and rind; add to rice mixture. Cook 2 or 3 minutes. Beat egg white until stiff, but not dry; fold into rice mixture. Serves 8.

Butterscotch Pudding

3 *T. butter*
1 *c. brown sugar*
4 *T. cornstarch*
¼ *tsp. salt*
2½ *c. milk*
1 *egg*
2 *T. caramel syrup*

Make caramel syrup by melting 2 T. sugar in heavy saucepan or frying pan. Cook until rich brown in color. Add 2 T. hot water. Melt butter in top of double boiler. Add sugar and salt. Cook over direct heat until rich brown color. Add 2 c. milk. Bring to scalding point. Stir cornstarch in remaining milk. Stir into butterscotch mixture. Cook about 20 minutes in top of double boiler. Add beaten egg and cook 3 minutes longer. Add caramel syrup. Serves 6.

Fruit Floating Island

1 *c. fresh or drained canned fruit*
1½ *c. milk*
3 *eggs*
Sugar
½ *tsp. vanilla*
Dash of salt

Arrange fruit in six individual serving dishes. Scald milk in double boiler. Separate eggs; beat yolks slightly, add 3 T. sugar and a dash of salt, blending thoroughly. Add a little hot milk to egg mixture then combine with remaining milk in double boiler. Cook, stirring constantly until custard coats spoon (5 minutes). Remove from heat, add vanilla and pour over fruit.

Add salt to egg whites and beat until stiff but not dry. Gradually beat in ⅓ c. sugar. Half fill a baking dish with boiling water. Float meringue in six mounds on hot water, cover closely and let stand at room temperature for 20 minutes or bake at 325° F. until slightly browned (12 to 15 minutes). Lift meringue from water and place one on each serving. Serves 6.

Walnut-Brittle Bread Pudding

2 *c. stale bread cubes*
2 *c. milk*
½ *c. sugar*
2 *eggs*
Salt
½ *c. raisins*

Cut stale bread in ½-inch cubes. Place in buttered baking dish. Heat milk and sugar until sugar is dissolved. Beat eggs slightly, add salt and stir in warm milk. Add raisins and pour over bread cubes. Place in pan of hot water; oven-poach at 350° F. until knife inserted in center comes out clean (50 minutes). Remove from oven and top with following mixture:

Topping:

⅓ *c. brown sugar*
1 *T. melted butter*
1 *T. cream*
⅓ *c. chopped walnuts*

Blend sugar, cream and butter. Add walnuts. Spread over hot pudding. Place under broiler until topping bubbles and browns slightly. Serve warm or cold.

Jelly Roll Cream

1 *small jelly roll*
2 *T. gelatin*
6 *T. cold water*
2¾ *c. milk*
3 *eggs*
¼ *tsp. salt*
1 *tsp. vanilla*
⅓ *c. sugar*

Cut jelly roll in ½-inch slices or spread jelly over slices of white cake. Place slices around outside edge of a well-greased mold or sponge cake pan.

Soak gelatin in cold water. Scald milk in top of double boiler. Separate eggs. Beat yolks slightly, add salt. Gradually add milk to egg yolks, stirring constantly, then return to double boiler. Cook over hot water until custard coats spoon (5 minutes). Remove from heat and add softened gelatin. Cool and add vanilla. When thickened, fold in meringue, made by gradually adding sugar to stiffly beaten egg whites. Place by spoonfuls into oiled mold lined with jelly roll slices. Chill until firm. Unmold just before serving and garnish with whipped cream.

For contrasts in texture and flavor top bread pudding with walnut-brittle mixture

Laws of Interest

Continued from page 39

provincial authorities as set up under the British North America Act of 1867—the Constitution of Canada. The provincial legislature has the exclusive right to legislate concerning municipal institutions, public lands belonging to the province, the solemnization of marriage, property and civil rights within the province and in general all matters of purely local and private interest.

OPENING sections deal with the franchise, telling how federal, provincial, municipal and school board voters' lists are prepared and revised, those who are eligible for nomination and election to public office.

The section dealing with comparatively new legislation will be read with more than usual interest as its content may be unfamiliar to many. In 1952 Manitoba law was amended to make women liable to serve on juries. In 1947 the Canadian Citizenship Act was passed by the federal parliament. Thus, for the first time, the status of Canadian citizens was defined. Marriage between men and women of different national origins raises problems in some cases. Of recent years we have received many newcomers from other lands. The citizenship of such people and their children is of importance. Men and women alike should endeavor to understand their status.

The old familiar subjects of discussion: property holding, dower law, the making of a will, what happens when there is no will, laws concerning the maintenance of a family, succession duties and exemptions from creditors' claims are dealt with briefly but adequately for purposes of a general background of information. Too often such information has to be gathered and absorbed, when the parties concerned are deeply engrossed in their private grief, confused by some tragic event or worried over some problem of debt or insecurity.

LAWS pertaining to the private and personal affairs in the life of the individual are outlined concisely under Section 3: marriage, divorce and domestic relations such as legal separation, maintenance orders for support of minors — and how the provinces have developed reciprocal procedures in dealing with such cases will interest many persons who may occupy positions on advisory committees or boards or for others who aspire to election to public office at the municipal or provincial level.

The last four sections of the booklet Laws of Interest to Women deal with wide fields: welfare of children; public health, education and labor, naming the main governing pieces of legislation and showing the division of authority between the provincial and federal governments. These explanations should enable the reader to grasp the underlying principles behind the laws concerning the family and rights of the individual members.

When the reader has read and mentally digested the information provided she will likely have more questions to ask and be spurred on to further study, and enabled to understand how differences may arise depending upon residence in other provinces, as compared with Manitoba.

Uses for Sealing Wax

by TED OTSU

UP to now my closest association with sealing wax has been the movies. I have watched a member of the film family dash off a furtive letter, seal it with a family crest and send it to a ladylove. Today I hear of it for its decorative qualities.

Sealing wax comes in stick form and in many shades, consequently it is easy to use and colorful. Suppose you'd like to make a picture frame that looks like French porcelain. Cut a cardboard oval to fit over the picture.

Heat the end of a white sealing wax stick over "canned heat" flame or alcohol lamp until it is ready to drip. With a quick, stippling motion, dab the wax three or four times to the cardboard foundation. Repeat until the frame is covered with a rough-textured finish.

To decorate with "flowers," heat pink sealing wax and allow it to drip, one drop at a time, and fall where desired. Shape the dots with a cold nutpick before the wax hardens. Leaves are made in the same manner. Heat tiny pearls or sequins and place them in the center of each flower.

Mount the picture to another cardboard oval and place the frame.

For a pearl-studded trinket box, shellac a round, clear plastic box and tape a paper drawing of your design inside the lid. Heat the end of a stick of gold sealing wax until it's ready to drip then with a quick downward motion dot the wax stick around the edge of the box forming scallops.

Leaves and lilies are formed of droplets of white and green wax. Mold them with a cold nutpick, before the wax dries. If the pick sticks dip it in cold water to cool. The tiny pearl beads are heated on a long needle, passed quickly through the flame before being placed on the lily.

Another attractive decorative piece is an ivory match box made from plain match box base with white wax molded on it. Scrape a little wax off the stick onto a palette knife, pass the knife through the flame and apply.

The heated knife will smooth out the roughness. For the design, heat the wax until it is ready to drip and then quickly allow it to fall in place. Shape each successive drop with a cold nutpick.

A most unusual necklace is formed by cutting half-inch pieces of wax with scissors. Each bead is held on a steel knitting needle over the flame and revolved slowly. Before it becomes too soft, remove it from the flame, cool, and then mold with your fingers to the desired shape. Finger marks are removed by again heating it. Dip it in cold water and dry with a soft cloth.

To achieve several colors on one bead, heat the sticks of color you wish to use and make dots on the bead about one-quarter inch apart. Again place it over the flame, revolving in one direction so the colors flow around the bead and intermingle. Cool again in water and wipe dry.

The beads are removed by heating the needle and inserting it in front and back of the bead.

With School in Mind

No. 1237—For the teacher—the new long look is emphasized in this two-piece dress. The scooped lowered waistline is flattering; the sleeves may be short or three-quarter length; and the skirt has the controlled fulness of four large pleats. Sizes 11, 12, 13, 14, 15, 16 and 18 years. Size 14 requires 4¾ yards 36-inch plaid without nap or 3½ yards 54-inch material with or without nap. Price 50 cents.

No. 1254—For junior school girls, too, the long bodice is attractive and new. Imitation pockets accent the lowered waistline; the 100-inch skirt is gathered; and the cuffs on the set-in sleeves and edging on the small collar contrast in color. Sizes 6, 7, 8, 10, 12 and 14 years. Size 10 requires 3 yards 36-inch or 2½ yards 44-inch material. Price 35 cents.

No. 4928—For school or best make this princess-line jumper. Instructions include adjustments for the chubby girl. The blouse buttons at the center front, has a small collar and puff sleeves. Sizes 7, 8, 10, 12 and 14 years. Size 10 requires 3⅝ yards 36-inch or 2¼ yards 54-inch material for jumper; 1¼ yards 36-inch for blouse. Price 35 cents.

No. 1256—For the early teens—a princess-line jumper with square neckline and flaring skirt is easy to make. Edge the skirt and neckline or square collar with braid for a bright touch. Sizes 7, 8, 10, 12 and 14 years. Size 10 requires 3⅝ yards 36-inch or 2¾ yards 45-inch material. Price 35 cents.

No. 1253—Unpressed pleats or gathered skirt, low waistline, button front and short or three-quarter length sleeves are features of this plaid and plain teen-age dress. Sizes 7, 8, 10, 12 and 14 years. Size 10 requires 1⅝ yards plain and 2⅛ yards plaid 36-inch material. Price 35 cents.

No. 1251—For the beginner—a jumper with an empire waistline and gay puff-sleeved blouse. Skirt flares to 90 inches. Sizes 1, 2, 3, 4, 5 and 6 years. Size 4 requires 2 yards 36-inch or 1⅛ yards 54-inch without nap; blouse ⅞ yard 36-inch material. Price 35 cents.

No. 1249—The longer waist of this beginner's dress is edged with a bias band. Bodice buttons at back, the skirt pleated or gathered and collar and cuffs on the set-in sleeves are edged in contrasting material. Sizes 2, 3, 4, 5 and 6 years. Size 4 requires 2⅜ yards 36-inch or 2 yards 45-inch material. Price 35 cents.

All patterns are printed; instructions in English, French and German.

State size and number for each pattern.

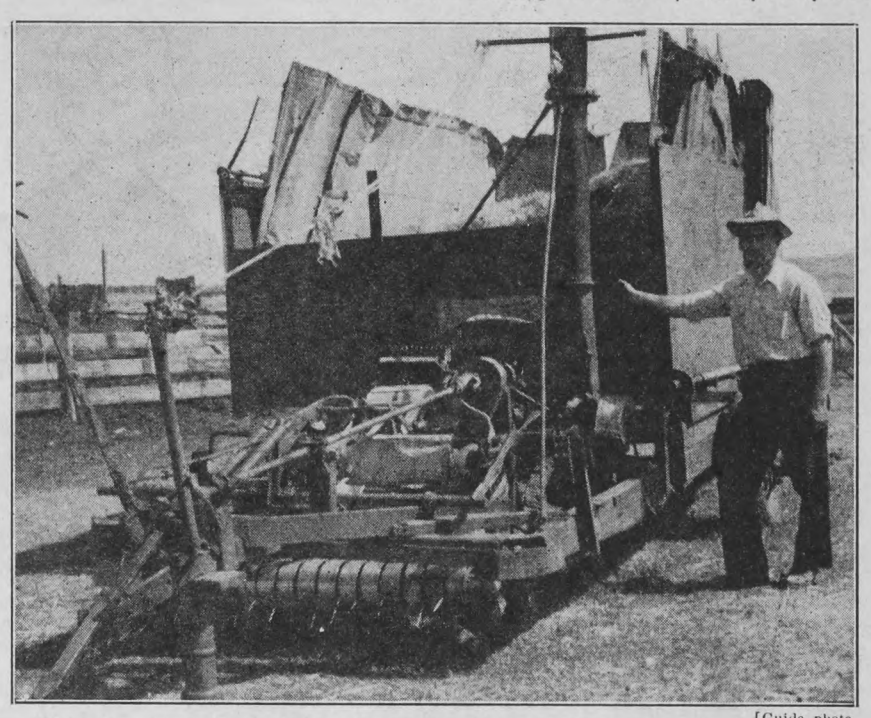
Note price, to be included with order.

Write name and address clearly.

Order Simplicity Patterns from The Country Guide Pattern Service, Winnipeg 2, or direct from your local dealer.

Home-Made Forage Harvester

Farmer finds broad scope for his inventive streak building machines from spare parts



[Guide photo

With this home-made forage harvester, George Matthews can put up 300 tons of grass silage almost alone. It also handles dry forage.

GEORGE MATTHEWS farms five quarter-sections north of Hardisty, Alberta. It is largely grain country, partly treed and sandy, but he has swung strongly to grass. Born with an inventive streak that keeps him busy around the yard, when he isn't on the land, he has designed and built his own one-man forage harvester. Using this, he can put up about 300 tons of grass silage himself, with only an occasional day of help from casual laborers.

With two trench silos and a set of home-made overhead tracks leading from the silos to his feedlot, feeding is greatly facilitated. He would like to see the entire farm in grass: however, much of it is rented from absentee landlords, so that such an idea is not practicable. The landlords want grain as their share of the crop. "I can't sell them on the value of grass," he says, "but I can see it myself."

His home-made forage harvester, seen sitting in the farmyard, has the appearance of a rare monster. Actually, it is a cross between several different machines. The chassis is that of an old truck. On the front, he has mounted a pick-up which takes the grass from the swath and carries it back to the feeder, on canvas belts. The feeder shoves it into the cutting box, where it is cut and blown back. Behind the cutting box he has built a self-unloading box. Thus, the machine will handle either silage or dry forage, and is pulled by a tractor and powered by a power take-off.

This is how the Matthews system works. He cuts and swaths the grass for a couple of hours—starting early in the season, as the clovers are coming into bloom. (His favorite mixture is brome, alfalfa and sweet clover). Then he drags in the forage harvester loads up and heads for home, where he can drive between the two trench silos. A system of pulleys, again powered by the tractor, elevates one side of the truck box and dumps it. He can put the grass in either silo, and a tractor packs the silage.

As a special attachment, for use when he wants to blow dry or wet roughage from the wagon, a back-feed has been arranged. The forage can be thrown through a hole in the front of the box, into the blower again, from which it is blown through the pipe.

George Matthews has another trick that is of interest. He throws a little seed clover into the seed box, for every field of grain. It provides fall pasture and can be plowed in spring. Moreover, the occasional field, where the catch is especially good, is used for silage the following spring.

Mr. Matthews has been finishing off his calves with silage, and finds that it is the best feed he ever used. Having plenty of silage, he gets along with a maximum of five pounds of grain daily for the steers. "It is all they need," he says, and took The Country Guide representative to have a look at them. The steers certainly were not hungry. In fact, they were ready to go out, at close to the market top. That's what good silage, well-fed will do. V

Food Deficit Countries

IN Asia and the Middle East, the deficit between food production and consumption is growing year by year, in spite of the fact that agricultural production in the last three crop years has been higher than the prewar average. The upsetting factor, of course, is the steady rise in population. Even excluding areas under the U.S.S.R., Asia and the Middle East have 55 per cent of the world's people.

Assuming that the population of these areas is now increasing at the rate of 1.5 per cent per year (a very conservative estimate), the next ten

years will see an addition of 230 million more. To feed them the world would require an extra 40 million short tons of food grain, or about 80 million additional acres of land in food grain at current yields. An impossible goal in the light of the food production history of these countries.

Both Asia and the Middle East have changed from net exporters to net importers of food grains since 1939. Last season they imported about 4.8 million tons. If food grain production was to increase by 25 million tons in the next ten years, the deficit would still stand at about 20 million tons. Out of some 18 Asian and Middle Eastern Countries, only Ceylon and Thailand have increased their agricultural production to the point where it has outstripped the population growth. V

Eighteen Cows On Ten Acres

WILFRED ALEXANDER, who farms three quarter-sections of irrigated land northeast of Picture Butte, Alberta, put 1,250 pounds of 11-48-0 through his drill on a ten-acre pasture field last spring, and the results surprised even his hopeful expectations. He grazed 18 dairy cows and several yearlings on the field during the summer, except for three weeks in August. Now he is seeding more acres to forage, using a mixture of orchard grass, brome grass, creeping red fescue and White Dutch clover.

Mr. Alexander plans his farm around livestock. In addition to his dairy herd, he runs 40 beef cows and feeds about 40 steers each winter. Livestock, he says, are like ready cash. Banks will always lend money on them, when it is needed for farm work, or improvement. V

A Grain Farm with Self-Feeding Silo

FRANK DEPALME says that a combination of forage and cattle feeding provides manure for the land, forage crops for rotations, and a useful bonus by way of extra revenue from livestock. He farms 500 acres west of Red Deer, Alberta, and insists that it isn't sound to grow grain only on Alberta's grey soils.

He is farming the easy way by cutting down on labor requirements, and has set up a steer-feeding system by which 150 animals can be cared for, with about an hour's work each day. Once a week, another few hours of work are required to fill the self-feeding chop bin. After that the cattle are on their own.

The central feature of this labor reduction program is a self-feeding silo which is 130 feet long, 16 feet wide at the bottom, and 20 feet wide at the top. Because the first year it was in operation the cattle punched through the ground and were unable to feed from it in the spring, it now has a concrete floor or base.

The steers eat silage at will, and eight or ten can feed at once. The silage consists of oats cut green, sweet clover, and alfalfa. From outside mangers they can have free choice of green feed, and alfalfa hay that has gone through a forage chopper, in addition to chopped barley, oats and wheat from an indoor self-feeder.

The 45 acres presently in clover and alfalfa is being increased, now that Frank has demonstrated to his own satisfaction how valuable these legumes are. V

This Rotation Doubled His Herd

EVER since J. P. Rozmahel moved from a heavy clay farm to the sandy loam just north of Viking, Alberta, he has been fighting erosion. It's not really a fight any more, because he has the upper hand. But 18 years ago, when he moved, drifted soil that partly covered the fence rows warned him what could happen if he became careless.

Trash cover and livestock have given him control since then, and now the farm is so free of weeds, that most of his crop goes as seed. Even so, he is still searching for better methods to farm his land, and frequently comes up with ideas that pay off. For instance, a few years ago, working it out with his district agriculturist, he planned an 11-year crop rotation. It called for six years of grass, then subsequent crops of oats, following the fallow, then wheat, barley and finally oats again as a nurse crop for grass.

When he started this rotation, he recalls that he had trouble feeding 30 or 40 head of cattle. Now the herd has jumped to over 100 head, though he still grows plenty of grain and has enough roughage to feed every animal.

He doesn't follow the rotation slavishly, but varies it according to the weather conditions and the changing needs of his farm. Its worth has long been demonstrated.

Actually, 150 to 200 acres of pasture and hay provide all the forage he needs. He has had his best success with a mixture of alfalfa, brome, crested wheatgrass and creeping red fescue, at 10 pounds to the acre. Most of the remaining land is seeded to crop.

Even with sod to be broken every year, he has virtually abandoned the plow. Last spring, he tore up his breaking with three separate strokes of a heavy-duty cultivator, equipped with chisel points, travelling in a different direction each time. He followed this with a stroke of the disker, keeping at it all summer, to control weeds, but still maintaining the surface covering of trash.

What is a croquette, but hash that has come to a head.—*Irvin S. Cobb.*

Last fall, Mr. Rozmahel had a new idea. He had never attempted breaking up the subsoil, even though he was on the edge of the solonetz soil zone, which is noted for its hardpan formation. Now he gave all his cultivated land a stroke of the chisel cultivator, set as deeply as possible into the ground. Despite wet conditions this spring, the surface dried up faster and was ready earlier than he would normally have expected. He plans to carry out that tillage method each year now.—D.R.B. V

Helpful Suggestions

for solving many farm problems are found in every issue of *The Country Guide.*

U.S. Farming Is Different Now

Agricultural production continues to rise in the United States, although farm population and the number of farms steadily decline

IN a recent article, W. C. Hopper, Agricultural Counsellor to the Canadian Embassy, Washington, D.C., described some of the revolutionary changes that have taken place in the agriculture of the United States during the past few years. The introduction of new machinery and equipment, use of improved seeds and plants, better methods of cultivation, increased use of fertilizers, more effective control of weeds, and plant and animal diseases, plus the adoption of recent discoveries in feeding and breeding of farm animals, have all resulted in a higher production per farm worker, per acre, and per farm animal. This, despite the fact that the number of farms and the farm population are steadily declining.

This increased production is the result of vastly increased wartime and postwar demands for food, feed, and fibre, and has been stimulated by government assistance of many kinds, including loans, subsidies, and funds for soil and water conservation. Although there has been an increase of only 15 per cent in crop acreage since 1910, farm output has increased by 75 per cent. To put it another way, in 1940 each farm worker produced enough food and fibre for himself and ten other persons — today he produces enough for himself and 18 other persons. Since 1939, there has been an increase of 40 per cent in production, with no increase in the number of acres being cultivated.

According to last year's figures, the five million farms and ranches of the United States represented a total investment in land, livestock, and machinery of about $127 billion, which indicates an average investment of $25,000 apiece. In addition to this, farmers had an investment of $11 billion in household furnishings and equipment, and $22 billion in bank deposits, bonds, and other securities, to give average total assets per farm operator of about $32,000.

IT is estimated that about 100,000 young Americans wish to start farming on their own each year. Some idea of the financial hurdle they must face can be gleaned from 1953 figures. These reveal that the average investment required for a Corn Belt cash-grain farm was $88,150, for a northeast dairy farm, $28,400, and for a southern Piedmont cotton farm, $14,290. Even to start out as a farm renter, requires a heavy investment in machinery, equipment, and livestock. These items accounted for $10,160 of the investment required for the average Corn Belt farm, $12,000 of that required for the northeast dairy farm, and $2,200 of the amount needed for the cotton farm. In the Corn Belt, it takes an investment of nearly $50,000 to create one farm job, as compared to $12,000 to $15,000 to create a job in other American industries. In addition a modern family-sized farm also requires a high level of managerial ability.

For the time and money expended, the prospective farmer can expect a financial return well below the national average. In 1954, the total net income of all farmers and ranchers in the United States was about $12.5 million, which averages out to $2,500 per farm. Nor do all farmers have incomes as high as the average—an estimated 1.3 million operators were found to have cash incomes of less than $1,000 a year. This is understandable when you consider that 55 per cent of America's farms produce more than 90 per cent of all U.S. farm products sold. There has been a definite trend to bigger, more efficient farms, so that the average size of farms has increased, although the actual number of farm units has declined. On these modern units, farming is being treated as a business rather than a way of life, and the mass production methods of business applied to the agricultural field have played a big part in the tremendous production rise.

THE increase in farm equipment and machinery over the past few years has been a major contribution to this increased production. From 1943 to 1953 tractor numbers have doubled, grain combines almost trebled, and corn pickers more than quadrupled on American farms. Farms with milking machines have also increased about two-and-a-half times. But in that same period, the number of farm horses and mules has declined 60 per cent. This changeover to mechanical power is expected to continue as more and more farm machines are adapted to tractor use. Tractors now supply more than 80 per cent of the power used on grain farms, but still only 40 per cent of that used for planting corn, cotton, and potatoes.

The number of farm units in the United States has declined by more than a million since 1935. But in the past ten years, the average size per unit has increased from 175 to 220 acres, and the number of farmers owning their farms has increased from 61 to 73 per cent. About 22 million people, or 13.5 per cent of the total population of the United States, live on the nation's farms today. Since 1950, this farm population has been declining at the rate of three-quarters of a million per year, the greatest portion of this loss being registered in the 20-24-year age group. The proportion of population living on farms varies widely from state to state, from a high of 55 per cent in Mississippi, to a low of two per cent in Massachusetts.

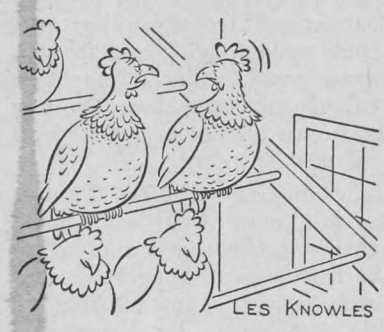
The farm Gross National Product per worker has risen an average of two-and-a-half per cent since 1929, as compared to a rise of only one-and-a-half per cent for the non-farm private worker. Farms and ranches in the United States cover about one billion acres, or some 60 per cent of the total land area. Of the 350 million acres sown to harvested crops in 1953, 10 per cent produced material for export, four per cent for horse and mule feed, and 86 per cent for food, fibre, and tobacco for domestic human use. The advent of farm machinery has made it possible to divert 80 million

acres from growing horse and mule feed to producing products for domestic human use since World War I. Added to this, there has been a per acre production increase of 20 per cent, and a 63 per cent increase in livestock production per breeding unit, in the same period.

By 1953, the use of commercial fertilizer had increased three times from the amount spread on the land in 1940. The increased production per animal is well illustrated by the fact that milk production per cow in U.S. dairy herds increased from 4,033 pounds in 1934 to about 5,500 pounds in 1954. Production of eggs per hen now averages about 180 yearly, a rise of 60 per cent over the average production of 20 years ago. Poultry meat, pork production per sow, and beef production per acre have all followed this upward trend. To cap it all, the man-hours of labor used for farm work have been cut by more than a third in the past 40 years, especially since the end of World War II.

As in other countries, it has been clearly demonstrated in the United States that a depression in agriculture will spread through the whole economy. While there are only about eight-and-a-half million workers actually employed on farms, there are ten million engaged in processing and distributing agricultural products, and a further two million in the manufacturing, distribution, and sale of farm machinery and supplies. These 20½ million workers represent about one-third of all employed persons in the United States. Moreover, one-half of America's families get some income derived directly, or indirectly from agriculture; and one-quarter of the total number of business establishments in that country produce, process, or distribute farm products or the goods made from them.

In 1952, U.S. farmers bought more than seven million tons of steel, 16½ billion gallons of crude oil, 320 million pounds of raw rubber, and used 15 billion kilowatt hours of electric power. Yet for every dollar spent in the United States for food, the farmer receives only 44 cents, as compared to 56 cents of the food dollar obtained by other workers. But many people still shout "blame the farmer," when the cost of living starts to rise. — C.V.F. √



"Do you ever worry about falling off in your sleep?"

Costly Grass Fire

THE most valuable commodity in the semi-arid ranching areas of Alberta is the grass that covers the prairie. One of the worst disasters in such an area is a grass fire.

This spring, a fire was left unattended in the ranching district north of the Red Deer River and east of Wardlow, where oil drilling crews are working. A strong west wind suddenly blew up. The fire leaped out into the spring-dried grass, and by late morning, when it was first noticed, it was out of control. It raced eastward across the prairie, threatened at least two farm homes, and though it was fought by a gang of perspiring farmers and ranchers, backfiring land and plowing fire-guards, it was not finally quelled until it reached a road 20 miles to the east, late that evening. Behind it was a charred strip of land up to five miles wide. A grass cover, which had taken years to develop, was consumed. Part of a section of the Bob Anderson sheep farm was burned over; three sections from the corner of the Vee Bar Vee ranch were burned, while the entire grazing leases of other ranchers were said to be ruined. No one can tell for certain how long it will be before the fields can be pastured again satisfactorily—and all because a fire was left unguarded. √

When Writing to Advertisers Please Mention The Guide.

My Most Exciting Adventure

Only a wind-blown pine stood between the writer and certain death in the cold waters of the North Saskatchewan

by **BRUCE CRESSMAN**

IT was a brisk day in the fall of 1928. A hint of winter lay in the cold wind that whipped our faces, as the survey pack train reached the banks of the North Saskatchewan. Our route ran through the rough country beyond the river, but the nearest ford was several miles downstream.

Sliding stiffly from our saddles, we waited for Marshall, the head surveyor, to join us.

"How about trying to cross here," he said as he rode up. "Save ourselves a few miles of rough going."

He looked at me as he spoke. As head packer and guide of the party, I would be expected to try it first. If it was safe, the others would follow.

I shook my head. "Nothing doing," I said, "I don't know this part of the river, and crossing her is a tricky business at the best of times."

"Doesn't look too bad to me," he said, peering across.

"You know this is a new horse I'm riding, Bill," I protested. "How do I know he can swim?"

"All horses can swim," he scoffed. "Give her a try anyhow—you'll make out all right."

I looked at the cold, swift waters doubtfully. Good swimmer though I was, I didn't favor the idea of a dip at this time of the year, in case the horse couldn't make it. But Marshall was the boss. Grumbling to myself, I rode down the bank and started across.

The noise of the water excited the horse as it closed around him, chest deep, but he kept his footing, and we reached the safety of a broad gravel bar without incident. On the bank, the other members of the party shouted encouragement.

But when I urged my mount off the bar into the deeper channel, we headed straight into trouble. The horse made no effort to swim, and sank to the bottom like a plummet. As I felt him go down, I freed myself from the saddle quickly, and struck out on my own.

It was a moment or two before I could collect my shocked wits about me. Then I swam with the current, trying desperately to find where the horse was drifting along somewhere beneath me. My only hope, I figured, lay in him coming up and deciding to make a swim for it; and I wanted to be near enough to grab him, when he did.

I had covered about twenty yards from the spot where the critter had gone down, when he bobbed up suddenly a short way ahead of me. I swam to him quickly, but as I grabbed for the saddle horn he sank from sight again. This rising and sinking routine continued for about a quarter of a mile, when he popped up again, almost beside me, and started to thresh about wildly. I grabbed him by the tail, and managed to get one soggy kick at his rear end to knock him out of his stupor. He started swimming desperately then, heading for some trees he could see along the bank. But we had delayed too long: the high banks and churning water in this sector of the river made it impossible to try for a landing here.

A numbing cold began to creep over me, and with it a feeling of hopelessness. We had drifted about three-quarters of a mile when I saw something ahead which brought hope surging back in me again. A few hundred yards downstream a large windblown pine stuck way out over the river, its trunk about eight feet above the water. If I could make a flying leap for that tree as we passed under it I might be able to make my way to shore. Quitting the horse was a gamble, but it was a case of now or never.

We were closing in on the tree pretty fast now. Cold and numb though I was, I managed to crawl up on the horse's back. He reared a bit under my weight, almost pitching me into the water again, but I recovered and stood up quickly as we came under the tree. It wasn't much of a leap I made, but it was all my stiffened legs would allow. Thank God it was enough! My numbed fingers clawed desperately at the roughened bark and I hung on for dear life. The tree sagged down as I hit it, dunking me back in the water, but now my fingers found the stub of a branch and my grip was secure.

Inch by inch I worked my way along the trunk. Above the roar of the river I seemed to hear voices shouting my name. Lifting my head I became aware of dark figures on the bank ahead. Some of the boys had followed my progress down river in the hope of r e s c u i n g me. Their shouted instructions finally penetrated my dazed brain, and I hung on and rested, while one of them crawled out to help me.

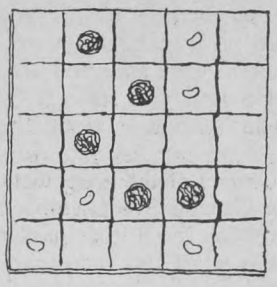
"Easy Bruce," he said, "just try to help yourself along—I'll hang on to you."

I remember little of that long painful crawl to safety. But I do recall reaching shore and swaying unsteadily in the center of that torn and tattered group that had raced through the rough country to aid me. Bill Marshall's face stood out among them, and I dimly remember that he was the so-and-so who was responsible for the whole business. My arms were so stiff by this time, the punch I launched at him set a new record in slow motion. He would've had a chance to brew a cup of coffee, and drink it, before the blow landed.

Meanwhile, farther down the river, some of the boys had managed to lassoo the horse, and tow him safely to shore. I was hustled back to camp, rigged up in some spare clothes belonging to the Chinese cook, and put to bed. That horse and I lay around camp in a daze for a long while before we were able to hit the trail again. By that time I was all over being mad at Marshall. I was too busy just being glad I was still alive. √

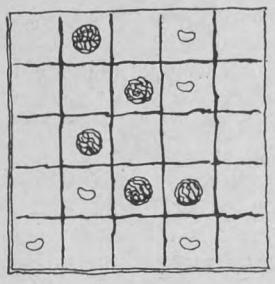
The Country Boy and Girl

A RAINY day in camp can be one of the most pleasant times of a holiday, for you can make your fun on the spot. Ernest Thompson Seton, the great naturalist who spent many years travelling with the Indians and learning their ways, told of an interesting game he saw them make and play. Here is the game called, "Quick Sight."



On two pieces of cardboard, or wooden board about one foot square, mark off 25 squares as shown in the diagram. Gather small white pebbles so that you have enough to give five to each player. You also need the same number of black pebbles, rose hips, nuts or walnut shells or anything about that size which you can find readily.

Each player is given a cardboard square, five white pebbles and five black pebbles (or whatever you choose for your second counter). One player becomes leader and places the five white pebbles and the five black ones in any pattern he chooses, one in each square. The other players are allowed to see how he has placed his counters for just five seconds before the leader covers them. Now each player tries to place his ten pebbles in the squares on his cardboard in the same pattern as the leader used. For each one he has right the player counts ten points and a score of 500 makes him winner. Besides being lots of fun, this game will greatly develop your powers to see and memorize quickly.



Ann Sankey

Penny Pinewood

by **Mary Grannan**

IT was a rainy day, and playing out-of-doors was out of the question. But this didn't worry Katy Kilgallen. Katy had a delightful way, and place, to spend rainy days. She slipped on her raincoat and sou'wester, and ran to old Mr. Merrybird's toolshed, at the foot of the garden. Old Mr. Merrybird had a way of puttering around on rainy days, and making things for Katy. Once he had made a very funny pig, from a potato and burnt matches. Another day, he had made a very fine doll's bed, from a shoe box and spools. Katy didn't know what he would make for her today, but she was sure it would be delightful.

Breathless, she opened the toolshed door and stepped inside. "Good morning, Mr. Merrybird, isn't it a lovely day?"

The old man laughed. "There are not many people who would agree with you, Katy Kilgallen, but I shall. I like a rainy day once in awhile." He winked. "I don't have to weed my carrots when it's raining."

Katy walked over to the work bench and looked around. There was no evidence of any toy in the making. Mr. Merrybird laughed again. "Don't worry, Katy. This is our day—yours and mine. We'll make something, but for the life of me, I can't think what. I've been thinking about it, and I've decided to let the grindstone decide."

Katy looked toward the large stone wheel that Mr. Merrybird operated by hand. As he turned the handle, he held his knife against the stone, and together, they made a whirring song.

Katy liked the idea of the grindstone deciding what Mr. Merrybird should make for her. She stood by anxiously, as he listened, and sang words to the song of the wheel.

"Mr. Merrybird, why don't you
Make a pinewood doll today?
There's a pine block in the corner,
You could cut the edge away.
You could shape a pretty dolly
From that little block of pine
And I think that your friend Katy'd
Like a dolly made of pine."

The little girl jumped up and down and clapped her hands. "It's true, Mr. Merrybird," she squealed. "I would like a pinewood dolly. Do you think you could make one, sir?"

"I can try," said the old man, his eyes twinkling. "The knife is sharp, and the pinewood is soft. What kind of a doll would you like her to be?"

It didn't take Katy long to answer that. "I'd like her to be pretty, and I'd like her wooden eyes to be blue, and her wooden cheeks red, and her dress to be pink, and her shoes to match her cheeks. I'd like her to have yellow hair. Can she look like that?"

Mr. Merrybird checked over the paint cans on the shelf of the toolshed. "I've got red here, and some white. There's a bit of blue, and by golly we have enough yellow left over to make her hair yellow. Yes, she can look just like you want her to look."

The chips began to fly, and it was not long before a little wooden doll began to take shape. Her head was as round as a ball, and just as smooth. Katy was a bit concerned, when she saw Mr. Merrybird cut across the wood sharply. "Oh, Mr. Merrybird," she gasped. "You've cut it too short. I wanted her to have legs."

"She'll have legs," said the old man. "She's going to have legs that will bend at the knees and ankles. Her arms will bend, too. I'm going to carve little sticks for them, and put them together with rings. She'd be mighty stiff if she didn't have a few joints."

Katy didn't want to stop for lunch, but her mother insisted, and invited Mr. Merrybird to eat with them. Katy told her mother the story of how the doll came to be made. "It was the grindstone, Mum. He told Mr. Merrybird to make a pine doll. We're going to paint her, and her name is going to be Penny Pinewood."

Both Mr. Merrybird and Katy's mother thought this a very nice name for the little doll. The doll was finished at about half past three. The paint was quick drying, but Mr. Merrybird suggested that Katy not handle the doll too much, until the next day. "Set her on the windowsill," he said. "She'll dry quicker there."

As Katy set her new treasure on the windowsill, she told Mr. Merrybird that today had been the nicest rainy day in her whole life.

Mr. Merrybird agreed. He was pleased and more than a little proud of the result of his work.

The next day was shining and beautiful, and the first thing that Katy thought of, when she waked up, was Penny Pinewood. Directly after breakfast, she hurried to the toolshed windowsill. Penny Pinewood was not there. Katy was not alarmed at first. She had seen Mr. Merrybird in the garden, and thought he'd taken Penny out for a bit of sun. But Penny Pinewood was not with Mr Merrybird.

Katy began to cry. "Now, now, now!" said the old man. "That won't do. You can't think when you're crying. Let's try to figure out Penny's mysterious disappearance."

Katy could come to no conclusion. Mr. Merrybird did much better. "Katy," he said, snapping his fingers, "I believe I know where that doll is. I made her legs so that she could walk. I think she's gone over to the pinewoods to look for her family. If I were you, I'd hurry over there. You should spot her easily in that bright pink dress."

Katy did. The tiny doll was talking to a scrub pine. "I'm looking for my family, Scrubby," she said. "Do you know where my family is?"

Scrubby nodded his short, scrubby branches. "Yes, I know," he said. "They're over at the farmhouse. One big branch made the walls on the rumpus room. One made the garden chairs, and one made the breakfast nook. They're all doing the pine forest proud. They'll live in usefulness for a long time. You were just a little block that was left over. You're a pretty little doll now. Why don't you go back and live among your folks?"

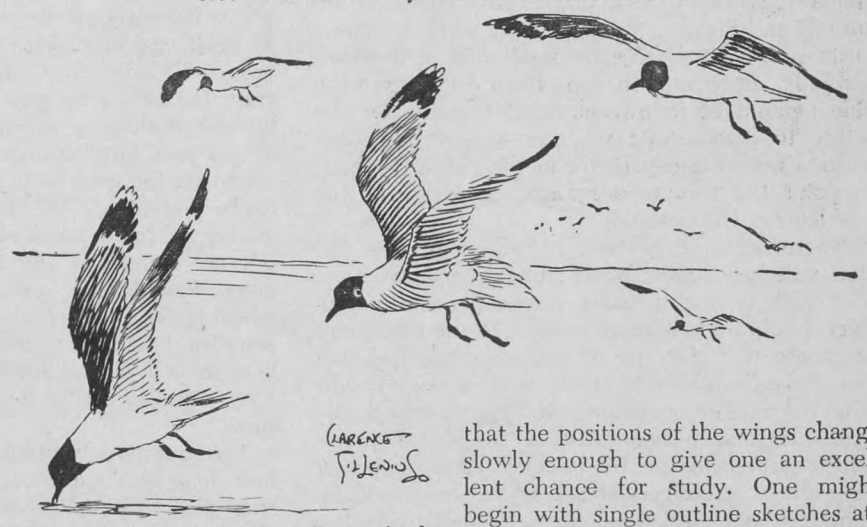
"I think I shall," said Penny Pinewood. "I know a nice little girl, Scrubby, and I like her."

"I like you too, Penny," said Katy, coming from behind the scrub pine. "Shall we go home now?"

Penny nodded her pinewood head. She lived happily ever after with the rumpus room, the breakfast nook, the garden chairs, and Katy.

Sketch Pad Out-of-Doors

***No. 42 in series—by* CLARENCE TILLENIUS**



TO think of gulls is usually to think of open lakes or the sea. However, as any country lad can tell you, the Franklin's gull is as much at home on the open prairie as over blue water. Many a farm boy has felt a thrill watching from his plow, these masters of flight as they dip and wheel over horses or tractor, scanning the newly turned furrows for grubs. Against the brown and black of the plowed land, their plumage of white, pearl grey and glossy black makes a striking contrast.

The gull's flight is deceptively simple. It seems so effortless as they coast and glide riding the air currents, that one is tempted to think that they must be simplicity itself to draw. It is not as easy as it looks, but it is true that the positions of the wings change slowly enough to give one an excellent chance for study. One might begin with single outline sketches attempting no more than to get the approximate silhouette.

One thing is certain: every movement is full of grace. These graceful sweeps and curves cannot be gotten with heavy black and labored lines. One should try to capture the light airy feeling of the birds in flight with rapid, light sweeps of a pencil or brush. Look carefully before you begin an outline. See how long, narrow and tapering the wings are compared to, say, of a sharp-tailed grouse. Notice if the legs are tucked up against the body or if they hang down as the bird circles the field. Notice, too, the black tip of the wing and the white band that separates it from the grey of the rest of the wing. Note, too, the shape of the bird's head.

THE Country GUIDE
with which is incorporated
THE NOR'-WEST FARMER *and* FARM *and* HOME
Serving the farmers of Western Canada Since 1882

VOL. LXXIV WINNIPEG, AUGUST, 1955 NO. 8

Not Recommended

TIME, assisted by the painstaking consideration of the Saskatchewan Marketing Board, has sealed the fate of the overly ambitious plan put forward by the Farmers' Unions of Saskatchewan and Manitoba to market all livestock through a single producers' marketing board. The public hearings held by the Board in the spring were alone conclusive of the divided opinion of farmers on the subject. They pointed, therefore, to the improbability that such a board, if established, could be successful. The verdict of the government followed promptly after the report of the Board, and the plan was dead. With a sigh of relief that was almost audible, the Government of Manitoba agreed, and the plan was, if anything, just a little deader.

Even if, by some magic, it had been established in both Saskatchewan and Manitoba, it still would have been doomed to an early death, because these two provinces alone could never have made it work for any length of time. It is at least a virtual certainty that neither Alberta, Ontario, the Maritime Provinces, nor, in all likelihood, Quebec, would agree—either producers or government—, to set up such a board.

What is now of concern to us, and should be of concern to livestock producers, is whether anything, or how much, can be salvaged from recent experience. It is somewhat doubtful whether producers in general have obtained much more knowledge about the marketing of livestock than they possessed before. Such discussion as there has been has centered around a specific and impracticable plan. Livestock marketing as such has not been the central theme, as much as the idea of bringing about the marketing of all livestock through a single board. Few producers who are engaged in the actual selling of a modest number of livestock annually, seem to think that present methods are entirely satisfactory. Many, at least, of those whose business it is to observe the marketing of livestock carefully, agree that there is room for a considerable amount of improvement. It remains for the future to demonstrate whether enough has been learned from the experience of the past two years, to point the way to a realistic approach to the problems of the industry.

There is no easy way of achieving the end that will be of most benefit to farmers generally. The truth is that livestock, especially cattle, producers fall into two broad groups. In the first group are those who, for one or more reasons, feel that they have been able to secure good enough results from the marketing channels and practices presently available, to keep them satisfied. The second group, which contains by far the larger number of smaller or average producers, tend to be less well informed about market practices, are relatively less dependent on income from the sale of livestock and are, therefore, less likely to produce animals for which the market will pay the best prices. Cattle producers of this group would be best served, for the present at least, by shipping through a livestock co-operative marketing organization, of which there are one or more operating in each of the prairie provinces, or by selling through a regional or central auction market. Successful livestock marketing depends fully as much on the kind and quality of the animals offered, as on the method of marketing. Once this central fact is accepted generally among farmers, it will be easier for them collectively to solve their livestock marketing problems. √

Wheat Agreement

THE third and final year of the second International Wheat Agreement has now begun, and speculation has already started as to the prospects for a satisfactory renewal for a further term. From Canada's point of view the circumstances could be much more auspicious.

It will be recalled that when the present agreement was under negotiation, the United States began the talks from a top price-level of $2.50. Some Canadian farm organizations, equally unrealistic but with less reason, urged $2.35. The final result was a maximum price of $2.05, with a minimum price of $1.55, which were accepted very reluctantly by the United States, and refused by the United Kingdom, who withdrew from the Agreement.

Meanwhile, the first two years of the Agreement have been very difficult for Canada. We have been fortunate in being able to rely on the British market for substantial sales, but as against this there have been several distinctly unfavorable factors which the Canadian Wheat Board and the producers have had to face. The factor of greatest over-all significance is the physical fact of the large, continuing surpluses on this continent. Another was contributed by the tendency of importing countries to increase their own production of wheat. A third has to do with the ability of the producer to deliver his grain and receive adequate prompt payment for it, in the face of rising costs. The task of the Wheat Board is also made infinitely more difficult by the fact of a billion-bushel surplus in the United States, and the U.S. policy of heavily subsidizing export sales and vigorously engaging in what are, in effect, give-away programs at public expense. Following upon these difficulties has been the failure of some I.W.A. importing countries to make the purchases normally expected of them, notwithstanding the fact that they are not obligated under the I.W.A. to make purchases, except at the minimum price of $1.55.

There is some feeling that the United Kingdom may come into the Agreement for another term. The United States also may continue membership, under pressure from Canada, despite her reluctance to formally commit herself to a continuation of the policy of heavily subsidizing exports. Canada, and Australia as well, would gain nothing,—and could lose much—, by any failure to renew the agreement on a reasonable basis. The principle that any degree of order is always to be preferred over a greater degree of chaos, is sound nearly any time. √

Bushels and Prices

IT is too early yet to predict the effect which the 1955 crop and sales of wheat for the coming year will have on Canada's wheat surplus. We enter the new crop year with around 450 million bushels of old-crop wheat on hand; and the success of the year just beginning will depend to a large extent on the amount of Nos. 1, 2 and 3 Northern to be harvested. We have plenty of the lower grades on hand to satisfy any probable demand, but not enough of the better grades which have given Canada her special position in the world wheat trade. In any event it seems likely that North America has carried over into the 1955-56 crop year some 1,470 million bushels of wheat and may have cause to repeat this performance a year from now.

The question naturally arises, therefore, as to how long this carryover of a very large supply, from year to year, can or should continue. Storage charges alone, for the 1953-54 crop year cost the prairie wheat producer an extra 8.5 cents. There is no evading the fact either, that many countries which normally import wheat have substantially increased domestic production; or that wheat yields in Europe have largely recovered since the war, if not actually increased over prewar levels. It is argued, of course, that if Canada were prepared to sell her wheat on the open market, prices would prevail at which the surplus wheat would disappear within a reasonable time. So far, this view has not been held either by the government, the Canadian Wheat Board, or by any substantial percentage of wheat producers.

What is much more certain is that fewer people today are producing more wheat than a larger number of people produced yesterday, and on very little more improved land. In Saskatchewan, for example, there were approximately 40,000 fewer farm workers in 1952 than in either 1928 or 1942, which also were years of bumper crops. Notwithstanding this drop in the number of farm workers, and after discounting the substantially higher yields of the later years, each worker still produced about 6,650 bushels of grain during the two years 1951-52, as compared with 5,070 bushels for the years 1941-42, and 4,980 for the years 1927-28. These are not precise figures, but are indicative of the trend toward increased production per worker which has accompanied the progress of farm mechanization. They suggest at least part of the reason for the grain surplus in North America, and for the decline in world wheat prices. Complementary to this condition is the fact that there are approximately 50,000 Saskatchewan farms of two quarter-sections or less, which, by all modern standards of efficient operation, are unable to produce commercial No. 1 Northern wheat for $1.56, but continue to do so, for the most part, at a sacrifice of family living standards. It seems clear that if these farms are not to be sacrificed to the trend toward larger farms, they must diversify their production. Twenty-five head of cattle and 11 pigs on each of them in 1951, would have taken care of all of the market livestock and dairy cattle in the province, except sheep, which were at a low ebb.

The long history and tradition of wheat growing on the prairies seems to have bred into officialdom a deep-seated reluctance to suggest that farmers should not grow wheat in all winds and weather, and regardless of circumstances as to soil, quality, costs, and markets. Is our stake in the present situation not critical enough to warrant some thorough study of the economics of wheat production in the light of all of the circumstances? It seems to us that farmers are entitled to the results of such a study. √

View from the Summit

THE four heads of government in the United States, the United Kingdom, France and Soviet Russia who met for six days (July 18-23) at Geneva, Switzerland, probably achieved as much as Sir Winston Churchill could have hoped for when he first suggested a meeting "at the summit" two years ago. Like any other four human beings who might have met at the summit of a high elevation where the view in all directions was unimpeded, the principals at Geneva brought with them their separate backgrounds, experiences and degrees of preparation. The summit view was not the same to all of them: nevertheless each left Geneva feeling, no doubt, more or less in accord with the sentiments expressed by Anastas I. Mikoyan, Soviet first deputy premier, in Moscow, who said on the evening that the conference adjourned: "The international atmosphere has changed, and the weather is good. When the weather is good, everything is good."

Words, of course, are cheap, and declarations from the heads of four great nations do not, of themselves, guarantee world peace. Nevertheless, the Geneva meeting seems to us to have been unique in having brought about a common opinion among the participants, that the meeting at the summit had done what it was intended to do. It laid the ground work for agreement on the problems of Europe, disarmament and of world peace. The second result was in a sense negative, in that the meeting was not marred by secret agreements or understandings.

Serious differences exist in the points of view of the four countries represented at Geneva. Even more serious are the psychological difficulties in the way of rapprochement between the United States and Russia. It will be difficult for each of these two world giants to believe that the other is both honest and sincere in a real desire for peaceful world development. Nevertheless, it would appear that the United States could have had no happier representative than President Eisenhower.

From now on the foreign ministers take over. Late this month, they will begin work on the matters that have been referred to them, at a meeting of the sub-committee of the United Nations Disarmament Commission, which will be followed by a meeting at Geneva in October. Meanwhile the world will wait patiently for the guarantees of peace, which the view from the summit seemed to clearly suggest are as possible as they are urgently needed. √

Only Galloways East of Montreal

by JACK A. WHITE

THE only herd of Galloways east of Montreal is kept at Mackinson's, Newfoundland, by George Mackinson, and their progress is being watched with close interest by Newfoundland agriculturists.

It's no secret that the Smallwood Government is going to lay heavy emphasis in the future on agriculture and high on the list are mink ranching, beef cattle, and sheep raising. That is why every Newfoundland farmer is so interested in the unique herd that George Mackinson runs. For Mackinson is keeping the animals outdoors all the time, even in Newfoundland winters. And that is something which has never been tried, heretofore, in Newfoundland.

Mackinson secured his Galloways in 1951, when he contacted the secretary of the Galloway Breeders' Association in the U.K. The animals selected for him came from the famous beef-raising area near Castle Douglas. Their arrival here touched off a surge of interest, because Mackinson announced that he would put them out and keep them out on the blueberry barrens and rugged hills of Conception Bay, giving them only supplementary feeding. He has done this ever since and when I was talking to him recently he said the Galloways were coming along fine. "They are really proving that here is a breed able to forage for itself on Newfoundland's rugged terrain, and yet flesh well and be generally profitable to keep," he said.

He indicated that two bulls from his herd have already gone to parts of Newfoundland, and are being used to breed up the grade cattle kept in most Newfoundland outports. Mackinson, himself, has been doing a bit of experimental cross-breeding. The cows have their calves outdoors and the young-

A few of Mackinson's Galloways that are adaptable to year-round outdoor life.

sters come along well. Mackinson feels that Galloways could really prove of value in any beef-raising program upon which Newfoundland farmers may embark. He is now intent on building up his herd, and at present has 16 animals at his ranch.

A farmer of one of Newfoundland's most highly respected families, Mackinson entered the political field and was elected as Liberal member for his district just after Confederation. After one term of office, however, he retired from politics and has since devoted himself exclusively to farming. A man with a remarkable career, he has also been pondering the possibilities of obtaining musk oxen and bringing them to Newfoundland. He admits, however, that the difficulties of securing them and then keeping them, present more of a problem than raising Galloways. √

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